

SIAM.—VOLUME I



HIS MAJESTY RAMA VI, KING OF SIAM.

SIAM

By W. A. GRAHAM, M.R.A.S.

WITH ONE HUNDRED AND FIFTY-THREE
ILLUSTRATIONS AND A MAP

IN TWO VOLUMES—VOLUME I

LONDON: ALEXANDER MORING
LIMITED, THE DE LA MORE PRESS
10 CLIFFORD STREET, W.I. 1924

BIBLIOGRAPHICAL NOTE

First and Second Editions : "Siam, a Handbook of Practical, Commercial and Political Information," 1 volume, 1912.

Third Edition : "Siam," 2 volumes, 1924.

*Printed in Great Britain by
The De la More Press, Limited,
10, Clifford St., London, W.1.*

21316
SLNO-014277

TO
HIS MOST GRACIOUS MAJESTY
RAMA VI

KING OF SIAM AND ITS DEPENDENCIES,
TO WHOSE FOSTERING CARE OF THE
LIBERTIES, COMMERCE AND ARTS OF HIS
PEOPLE THE PHENOMENAL PROGRESS OF
SIAM IN RECENT YEARS IS DUE, THIS
BOOK IS HUMBLY AND GRATEFULLY
DEDICATED.

PREFACE.

MANY and great changes have overtaken the world during the last decade, and nowhere are these more apparent than in Siam.

Consequently the last edition of this Book, which appeared in 1912, no longer represents the true state of the country either in its home affairs or in its relations with the outside world.

With the intention of satisfying the interest in Siam that her rapid and successful advance in foreign politics and commerce is stimulating abroad, the book has now been corrected and brought up to date, and in the process has expanded beyond the limits of its former designation as a 'Handbook.' It now reappears as a work in two volumes, and it is hoped that it may meet, in its new form, with a continuance of the favour that it was so fortunate as to receive under its former guise.

The writer is glad to acknowledge the kindness of H.R.H. Prince Damrong Rajanubabh, H.R.H. Prince Purachatr of Kamphaeng Bejra, and J. J. McBeth, Esq., in lending photographs for use as illustrations. Also to thank Mrs. J. Graham for her arduous labour in compiling the Indexes to the book, and W. W. Skeat, Esq. for revising proofs.

W. A. G.

BANGKOK, 1923.

CONTENTS OF VOLUME I.

	PAGE
DEDICATION	V.
PREFACE	VII.

PART I.

GEOGRAPHY :

Area and General Divisions	I
The Country and Towns	12
Climate and Meteorology	32

SCIENCE :

Flora	37
Fauna	66
Geology and Mineral	91

PART II.

THE RACES OF SIAM :

Racial Divisions.	102
Population	113
Negrito	116
Mon-Annam	119
Tibeto Burman	137
Siamese Lao-Tai	147
Unclassified Tribes	174

PART III.

HISTORY	178
SOCIAL ORGANIZATION	229
EDUCATION	250
LANGUAGE AND LITERATURE	260

BIBLIOGRAPHY :	PAGE
General	289
Works on the Siamese Language	300
Periodicals and Newspapers	302
GOVERNMENT :	
The Ministry of Foreign Affairs	308
The Ministry of War	311
The Royal Navy	319
The Ministry of the Interior	321
The Ministry of Finance	336
The Ministry of Lands and Agriculture	353
The Ministry of Commerce	361
The Ministry of Justice	369
The Ministry of Communications	378
General	382
INDEX TO VOLUME 1.	385

LIST OF ILLUSTRATIONS IN VOLUME I.

	PAGE
His Majesty Rama VI., King of Siam	Frontispiece
In the Western Frontier Range, North-west of Kanburi	2
Sacred Limestone-hill, Patalung, S. Siam	2
Islets off the Coast, Chumporn (<i>Photo. McBeth</i>)	3
Koh Phra Island, Gulf of Siam (<i>Photo. McBeth</i>)	3
Inland Sea, Behind Puket Island	3
Typical Scene, Central Siam	7
The Menam River, Utaradit, 350 miles inland	14
The Menam Chao Phaya River at Bangkok	14
The Meping Rapids	15
The Meyom River at Old Sawankalok	15
The Pasak River at Chai Badan	18
Far up the Kwaa Noi Branch of the Meklong River	18
The Mehkông River	19
Near the confluence of the Nam Mun and Mehkông rivers. The Franco-Siamese Frontier	19
A Riverine Town, Central Siam	22
A Canal in Bangkok	22
A Bangkok Waterway	23
"New Road." In the City, Bangkok.	24
Statue of Rama V. and Audience Chamber, Dusit Park	24
Grand Palace Enclosure	25
Ancient Fortifications and Moat, Chiang Mai.	26
Ancient Defensive Brick Wall and Rampart, Nan, Northern Siam	26
Floating Houses, Ayuthia	27
A Môn Girl	128
A Lawa Group	129
Kaché (Kamet), Women of Pang Hai	136
Meao Men and Women, Payap Circle	137
Muhsô Men, Muang Fang	142
Muhsô Women, Muang Fang	143

	PAGE
Kaw Woman	144
Sen Kwan Yao men. Doi Kong Kao	145
Yao Woman, full headdress	146
Yao Man and Woman, Doi Sawa	147
Siamese Woman	152
Royal Cremation : The Lying-in-State	164
Royal Cremation : The Funeral Procession	165
Funeral Pyre of H.M. the late Queen Mother.	165
Northern Lao. Husking Rice	166
Lao Sông Dam Women	166
A Village Market, N. Siam	167
Lao of Laplè, N. Siam	168
Lao Women of Ubon, E. Siam	169
Karien Woman, Me Sawt District (<i>Photo : McBeth</i>)	173
Karien Women, Me Sawt District (<i>Photo : McBeth</i>)	174
Civilized Karien, Kwaa Noi Valley	174
17-Century Fortifications of Lopburi	202
Ruins of Faulkon's House, Lopburi	202
Palace of King Rama IV., at Petchaburi	218
His Majesty King Rama V. (Chulalongkorn)	224
" Tiger's Whelps " (Boy Scouts)	242
Typical Government School Building	256
Preparation of Palm-leaf writing material	278
Monument in Bangkok inclosing the ashes of Siamese Soldiers who died in France	316
The War Office, Bangkok	316
Siamese Artillery Marching	317
Troop of the S.E.F. ; Returned from France 1919	318
Old Road Bridge in E. Siam	380
Swinging Foot-Bridge in C. Siam	381
The Singhla-Kedah Road, S. Siam (<i>Photo : State Rail- way Dept.</i>)	382
Map of Siam	384

PART I

GEOGRAPHY.

AREA AND GENERAL DIVISIONS.

FROM the earliest times the great peninsula which lies between India and China, and is now generally known as Further India, has been peculiarly subject to foreign intrusion. Successive waves of Mongolian humanity have broken over it from the north, Dravidians from India have colonised it, Buddhist missions from Ceylon have penetrated it, and buccaneers from the islands in the south have invaded it. Race has fought against race, tribe against tribe, and clan against clan. Predominant powers have arisen and declined. Civilisations have grown up, flourished and faded. And thus out of many and diverse elements a group of nations have been evolved, the individuals of which, Môn, Kambodian, Annamese, Burmese, Shan, Lao, Siamese and Malay, fundamentally much alike, but differing in many externals, have striven during centuries for mastery over each other, and incidentally over the countless minor tribes and clans maintaining a precarious existence in their midst. Into this mêlée of warring factions a new element intruded in the sixteenth century A.D. in the shape of European enterprise. Portuguese, Dutch, French and English all came and took part in the struggle, pushing and jostling with the best, until the two last, having come face to face, agreed to a cessation of strife and to a division of the disputed interests amongst the survivors. Of these there were but three, the French, the English, and the Siamese, and therefore Further India now finds herself divided, as was once all Gaul, into three parts

To the east lies the territory of French Indo-China, embracing the Annamese and Kambodian nations and a large section of the Lao; in the west the British Empire has absorbed the Môn, the Burmese and the Shans; while, wedged between and occupying the lower middle part of the sub-continent, with the isolated region of British Malaya on its extreme south border, lies the kingdom of Siam, situated between $4^{\circ} 20'$ and $20^{\circ} 15'$ N. latitude, and between $96^{\circ} 30'$ and 106° E. longitude.

Boundaries. Siam is bounded on the north by the British Shan State of Keng Tung, by the French Shan State of Muang Sing and by the French Lao State of Luang Prabang; on the east by the French Lao States subordinate to Annam from which it is separated by the river Mehkông, and by the French protected kingdom of Kambodia; on the west by the British territories of the Southern Shan States and Lower Burma down to Victoria Point in $9^{\circ} 35'$ N. latitude; and on the south by the Gulf of Siam. That part of Siam which extends down the long and narrow Malay Peninsula is bounded on the east by the Gulf of Siam and the China Sea, on the west by the northern waters of the Straits of Malacca, and on the south by the British protected Malay States.

Land Frontiers. The land frontiers of Siam have all been defined by treaty, and the exceeding vagueness of the position of her boundaries, which was until recently a disturbing factor in the politics of the country, has now been everywhere corrected. The land frontier on the west and north, from Kra in $10^{\circ} 30'$ N. latitude to the river Mehkông at a point just north of Chieng Sen, $20^{\circ} 5'$ N. latitude, 900 miles in length, has been delimited by Anglo-Siamese Commissions, the last of which operated in 1892-93. The line follows the crest of the mountain range which forms the backbone of the Malay Peninsula and further north becomes the watershed between the Tenasserim, the Tavoy and the



• IN THE WESTERN FRONTIER RANGE • N.W.
OF KANBURI.



• SACRED LIMESTONE HILL, PATALUNG, S. SIAM.

[see p. 12]



ISLETS OFF THE COAST, CHUMPORN.

[Photo: McBeth]



KOH PHRA ISLAND, GULF OF SIAM.

[Photo: McBeth]



INLAND SEA BEHIND PHUKET ISLAND.

[See p. 11]

(Siam I, p. 3)

Haung Daya rivers on the west, and the Meklong and its tributaries on the east. From near the source of the Thoung Yin river, the frontier follows that stream down its wild and sparsely inhabited valley to the point where it joins the Salwin, then up that river for 60 miles when, with a sharp turn westwards, it ascends to the watershed between the Salwin and the Meping and bears away north and east, along the range and over the top of giant peaks until it meets the Mehkông at the little village of Ban Mai.

From Ban Mai, $20^{\circ} 15'$ N. latitude, to the mouth of the Nam Mun river, about 15° N. latitude, the Mehkông, except where it passes through the State of Luang Prabang, makes between French and Siamese territory the clearest possible frontier. Near the mouth of the Nam Mun the line leaves the Mehkông and, turning westward, follows the Pnom Dang Rek range for some 200 miles, then bends south and, passing between the provinces of Prachin and Battambang, reaches the mountain range behind Chantabun. This range it follows south by east for 100 miles, parallel with the coast and some 20 to 30 miles inland when, by a turn to south by west, it meets the sea far down the eastern shore of the Gulf, and below the little province of Kratt. By the treaty which led to the final adjustment of this line from the Mehkông, the provinces of Malupré, Bassac, Battambang, Siemrap and Sisophon, once part of the ancient kingdom of Kamboja but long ago annexed by Siam, return to the former and thus come under French protection. The whole eastern frontier has been delimited by successive Franco-Siamese Commissions.

The land frontier across the Malay Peninsula was finally determined by the Anglo-Siamese treaty of 1909, and was delimited by a joint Commission in 1912.

The coast-line of Siam runs from the southernmost point of the Pattani Division on the east coast of the Malay Peninsula, right up and round the Gulf of Siam

and down to near Muang Kratt, the south-east corner of the Circle of Chantaburi (pronounced Chantabun), a distance of about 1,000 miles ; and to this must be added a strip on the west side of the Malay Peninsula, 350 miles long, where the narrow maritime Puket Circle forms the coast and separates British Burma from British Malaya.

Along this considerable length of coast-line is to be found almost every description of shore. At the head of the Gulf a shallow, dirty sea crawls over vast mud-flats, left bare for miles at low tide, and merging by almost imperceptible gradation through mosquito-infested swamps into the low-lying fields and marshes of Central Siam. Down the eastern shores of the Gulf the aspect quickly changes, the sea becomes a clear and sapphire blue, mud banks give place to sandy beaches, and the land, thickly wooded where not under cultivation, rises gently away from the shore into low hills. The coast is deeply indented and forms a series of islet-studded bays of surpassing beauty. East and south of Cape Liant the shore becomes more rugged, in many places bold rocks protrude from the sea and the land rises steeply up towards the heights of the Patat mountain range from which many small and rapid streams run down through narrow valleys to the sea. On the western side of the Gulf long, low shores alternate with high and precipitous cliffs to which vegetation clings as by a miracle. Here clear sparkling waters of the deepest blue beat upon golden beaches backed by groves of waving palm trees, or spout and blow amongst overhanging rocks and round about innumerable islets. The bays and inlets on this much indented coast form a series of excellent roadsteads; the four principal of which, Chumporn, Bandon, Sôngkla and Pattani, could afford good anchorage for practically any number of steamers and sailing craft of the kinds that frequent these ports. On the belt of Siamese coast-line west of the Malay Peninsula also are several ideal harbours,

once the resort of pirates and now much used by the swarms of junks and other sailing ships that carry much of the trade between the little ports of this region and the emporium of Penang.

Islands. The whole coast-line of Siam is fringed with islands, some of which are between one and two hundred square miles in area though the majority are much smaller. The most important of these is Chalang or Ujong Salang, a Malay name corrupted by Europeans into "Junk-Ceylon," and by Siamese into "Thalang," situated on the west coast of the Malay Peninsula, the centre of a flourishing tin mining industry. Natives of Telingana on the east coast of India resorted hither in the beginning of the Christian era, Arab traders visited it as early as the 10th century A.D., and European merchants frequented it from the middle of the 16th century onwards. In the 18th century the island was a cockpit of the wars between Burma and Siam, and, on account of its good harbour and convenient situation, it was one of the spots coveted by Germany as a naval station in the days when she possessed a war fleet. On the east coast, Koh Pangan and Koh Samui are the largest islands, the latter of these, in area about 100 square miles, reported rich in mineral deposits, and producing coconuts, said to be the finest in the world, while on the other side of the Gulf is the Si Chang island group, near the mouth of the River Menam Chao Phaya, in the shelter of which vessels too large to enter the river discharge and receive cargo; also the islands of Koh Chang, Koh Kut, and Koh Kong, lofty, precipitous and clothed with the densest vegetation.

Area. The area of Siam is estimated at 200,000 square miles, or about 40,000 square miles less than one-third of the whole of Further India. The greatest length, from north to south, is 1,100 miles, and the greatest breadth, east and west, is 510 miles.

Main Divisions. In describing the country most

writers have divided it into two or more parts, but no particular system, either geographical or ethnographical, appears to have been followed in doing so. From both these points of view the kingdom may, perhaps, be considered most conveniently in four parts, that is, Northern, Central, Eastern and Southern. The northern part consists of the drainage area of the four rivers which unite at about 16° N. latitude to form the Menam Chao Phaya, and of small sections of the drainage areas of the Mehkông and Salwin rivers, inhabited chiefly by Lao, more especially to the northward, and containing the ruins of many cities famous in ancient history. The central part includes the drainage areas of the Meklông, the Menam Chao Phaya and the Bang Pakong rivers which flow into the northern end of the Gulf, the country on the west side of the Gulf as far south as Kuwi, and on the east side down to below Muang Kratt. This is the heart of the kingdom, the home of the greater part of the Siamese population, and the source of nine-tenths of the wealth of the State. The Eastern part comprises the drainage area of the Nam Mun river and its tributary the Nam Si, and also a part of the drainage area of the right bank of the Mehkông river. The population of this part is chiefly Lao. Lastly, the Southern part embraces that section of the country which is situated south of the township of Kuwi in the Malay Peninsula, and includes the Malay dependencies of Siam. The population of this part is composed of Siamese, Malays and half-breeds.

Northern Siam, in area some 60,000 square miles, is a series of more or less parallel hill ranges and valleys lying north and south. The hills in the south-east corner, mere gently-sloping acclivities, rise gradually towards the west and north, until, near the western frontier, they join the Tanen Taung Gyi range, and tower into imposing heights. They are all thickly covered with forest, with here and there great masses



TYPICAL SCENE IN CENTRAL SIAM.

of rock standing out bare against the sky, or are dotted with the patches of cleared ground which proclaim the presence of hill-tribes. The hills are drained by countless streams which, small and insignificant or entirely dry during the hot weather, rush down in foaming torrents and cascades when swollen by the annual rains, increasing the volume of the Salwin and Mehkông rivers on the west and east, and of the Menam Chao Phaya to the south. The valleys vary between broad open lands smiling with crops, through which clear streams meander, and deep, shadowed gorges echoing to the voices of turbulent waters. Towards the south the rivers are fringed with wide banks of rich alluvial soil, near which the population clusters thickly, and where some of the most valuable agricultural produce of the kingdom is grown. Northern Siam is divided into the administrative Circles, or *Monton*, of Payap and Maharat, including all the formerly semi-independent states of northern Lao; of Petchabun, Pitsanulok and Nakon Sawan, the last of which, however, extends southward well into Central Siam.

Central Siam, of an area estimated at 55,000 square miles, consists practically of one vast plain stretching from the mountains which divide Burma from Siam, eastwards to the foot of the high ridges marking the edge of the tableland of Eastern Siam and the confines of Kambodia; also of two arms extending southwards to embrace the head waters of the Gulf of Siam. Here and there isolated hills rise abruptly from the plain, serving to emphasise the general flatness. Except, indeed, for these hills, for the slopes of the containing mountains east and west, and for the slightest of undulations caused by the extra accumulation of alluvium in the neighbourhood of the banks of the sluggish rivers which wind across it in a southerly direction, Central Siam is an uncompromising dead level. Belts and patches of jungle occur to the northward as well as in the east and west littoral districts, but the greater part

of the plain consists of wide expanses, thinly clothed here and there with tall Palmyra palms, dotted with the clumps of bamboo which mark the presence of villages, and divided by the lines of tall trees that fringe the watercourses. The surface soil is heavy, clayey, and entirely of alluvial formation, and about a quarter of the area is under rice cultivation, while the rest, covered in the main with grass and reeds, awaits practical schemes of irrigation and the coming of a population, which factors alone are wanting to make Central Siam the greatest rice-producing district of the world.

The plain lies at a very slight elevation above the sea, and is subject to regular annual river floods, which, by the deposition of vast quantities of silt, are slowly raising the general level. The whole area has a gentle slope downwards from north to south, and the land falls very slightly away at right angles to the banks of the rivers which flow on ridges of their own alluvial accumulation. There is abundant evidence that within recent geological times the sea flowed over a great part of this plain, and even now the northern shores of the Gulf are advancing seawards at the surprising rate of almost a foot a year. Central Siam includes the administrative Circles of Krung Tep, "The Heavenly Royal City," or Bangkok, the densely inhabited capital of the kingdom with its populous suburbs; Ayuthia, also called Krung Kao, or the "Old Capital," with its group of provinces; the Prachin and Chantabun Circles to the eastward, Nakon Chaisi and Ratburi to the west, and that part of the Circle of Nakon Sawan which is not included in Northern Siam.

Eastern Siam, some 65,000 square miles in area, consists of a huge shallow basin, contained in a circle of hills, together with a narrow strip of territory lying between the Mekong river and the hills which form the eastern edge of the basin. The basin is tilted towards the east, falling gradually away from a plateau

edge of 1,000 feet and more elevation which divides the Eastern from the Central part of the kingdom. Except in small and widely separated patches, poverty of the soil and adverse climatic conditions combine to render this great tract indifferently productive. No timber of much value grows in the thin, shadeless jungle which covers the slopes of the hills, while the huge swamps into which, owing to defective natural drainage, the lower lands are converted during the rains, encourage the growth of nothing but grass and reeds, which wither away and are burnt up when the hot weather comes. A population of some million and a quarter, Lao, Siamese and Kambodian, about 20 people to the square mile, inhabits this inhospitable land, wresting from the reluctant soil crops barely sufficient to maintain an existence, which, passed amidst damp and mud for one half of the year, and in a dry, hot and dust-laden atmosphere for the other, is one of the most miserable imaginable, more especially since this whole neighbourhood is peculiarly liable to the visitations of epidemic diseases affecting both men and cattle. Eastern Siam is divided into the administrative Circles of Korat, Roi-et, Ubon and Udorn, the two last, frontier districts, far distant and difficult of access, and therefore a good deal neglected.

Southern Siam, about 30,000 square miles in area, comprises all the narrower part of the Malay Peninsula, and is sharply divided longitudinally by the range of mountains which passes down the whole length of the peninsula, into two well-defined areas, the east and the west coast districts. The east coast district begins at Kuwi, where Central Siam leaves off, with a mere strip of land, in places not more than ten miles wide, sloping steeply upwards almost from the edge of the sea to the top of the range, here from one to two thousand feet high, where runs the Burma frontier. South of this and beyond the Isthmus of Kra, the district widens out until at Nakon Sri Tammarat, or Lakon as the province

is more usually called, a tract some seventy miles broad, of alternating hills and plains, lies between the sea and the border ridge which now divides the east from the west coast districts, Burma having come to an end at Victoria Point, a little further north. South from Lakon the district narrows again, passes the inland sea, or *Talé Sap*, at Sôngkla, and once more spreads out at Pattani. From here onwards to the southernmost point, on the seashore at Tabar, or "Takbai," the western boundary, no longer keeping to the range summits but following mountain spurs and hill streams and again crossing deep valleys, marches with British Malaya, veers round to the east and encloses a broad country of mountains and valleys. The natural scenery of this district is very beautiful, making a picture, constantly repeated with minor variations, of cerulean blue water, golden beaches, villages nestling amongst tall palm-trees, miles of rolling evergreen jungle behind these, and at the back of all magnificent purple mountains towering into the sky. Though generally of a hilly character, the east coast district comprises several broad, open plains of varying extent, where, on a light but rich soil of clay and sand alluvium, crops of rice are annually grown and large herds of cattle are raised. Round about the towns of Lakon and Patalung the largest and most fertile plains are situated. In these open lands a considerable population lives and prospers exceedingly by agriculture, and by fishing in the seas, which are here alive with fish of many kinds. Far different from that of the people of Eastern Siam, their lot is of the happiest, for with plenty to eat, an equal climate, and little or no disease, they scarce know the meaning of trouble. For purposes of administration the east coast district is divided into the Circles of Surat, Nakon Sri Tammarat, and Pattani.

One of the chief natural features of this district is the inland sea at Sôngkla, a stretch of shallow water

over fifty miles long, separated from the ocean by a strip of low-lying jungle-land, but communicating with it through a narrow opening at the southern end and a canal in the north. The surface is studded with islets, some densely wooded, others bare and precipitous, and the sea is surrounded by a fertile but thinly inhabited shore. The scenery from the southern entrance, between green hills topped with white pagodas, and waving groves of stately *Casuarina* trees, to a point some twenty miles to the northward, is superlatively beautiful. The lower end of the sea forms the inner harbour of Sôngkla, but there is not much shipping on the sea itself, as it is very subject to sudden and violent storms, and in some parts is extremely shallow.

The west coast district of Southern Siam was shorn of much of its area by the treaty of 1909 with Great Britain, which provided for the passing of the Malay States of Kedah and Perlis from Siamese to British protection. It now consists of a strip of country 350 miles long, backed by the central range of the Peninsular mountains and extending from the southernmost point of Burma down to the confines of British Malaya. It is narrower than the east coast district, has a more deeply indented coast-line, and more islands fringing its shore. The natural beauty of the district surpasses that of the east coast, its characteristics being similar to those of Tenasserim, further north. Great mountains sloping steeply up from the sea, showing purple against the morning sky, bright green beneath the midday sun, and grey when the shadows of evening are creeping amongst them; valleys of the deepest verdure descending to, and cut off suddenly by, the golden line of a sandy beach; bold promontories in a setting of silver seaspray, tall rocks of limestone or granite of every shade of red and grey and of the most grotesque shapes, here a tiny white sail aslant on the blue waters, there a brown junk heaving slowly up the coast; these are the reward of the traveller who leaves the

beaten track of the globe-trotter and ventures a day's sail from Penang into this little-known and unfrequented part. The west coast has very little land suitable for the cultivation of rice, but the soil is fertile and yields good crops of many other products, notably pepper, nutmegs and coconuts. Of streams, small, rapid and clear, there are many, but there is no water-course large enough to be dignified by the name of river.

Geologically the country is the same as the east coast district, with rather more frequent appearance of granite, and consequently greater disturbance of the stratified formations. The population consists of Siamese, Samsams, Malay and a few Semang Negritos. Malays predominate to the south, and Siamese to the north. There are also large settlements of Chinese, who have for several centuries been attracted thither by the tin mines. The total population may amount to about 300,000 souls. The whole district constitutes the administrative Circle of Puket.

THE COUNTRY AND THE TOWNS.

Physical Features. Further India possesses within its comparatively small area three remarkably fine rivers, one of the largest lakes in Asia, and several imposing mountain ranges and masses.

Siam, however, as at present constituted, does not actually contain within her borders any of these. The Mehkông river, one of the largest in Asia, forms for over a thousand miles the eastern frontier of the kingdom. The Salwin, almost equal to the Mehkông in length, touches the western boundary at more than one point, but nowhere has both its banks in Siam. The Talé Sap, the great lake of Kambodia, was, until recently, half within Siam, but by the latest "adjustment" of the eastern frontier now lies altogether without. The great mountain ranges which lie north

and south, down the sub-continent of Further India, diverge to the east and west of Siam, passing through Tonquin to the sea, and through Burma into the Malay Peninsula, the latter branch forming the boundary between Burma and Siam for some distance. But though the great natural features of the sub-continent appear to avoid Siam, or at most to lend her only a part of themselves, she contains within her own limits many mountain heights and ranges, many rivers, and a few lakes, which redeem her from monotony of conformation and scenery.

Mountains. The ranges of Northern Siam, varying from 500 to 4,000 feet in height, lie north and south like the bars of a gridiron all across the country, here and there throwing up lofty peaks, of which Doi-Intanon (8,450 feet), the highest mountain in Siam, Chieng-Dao (7,160 feet), Panom Pok (7,532 feet), Sam Sao (5,476 feet), Pa Wing (4,830 feet), Pachaw (5,900 feet), and Sutep (5,500 feet), the last two near Chieng Mai town, are the most conspicuous. The Korat plateau, with its flanking ranges, the dread Dong Phaya Fai, to loiter among the dark ravines and thickly wooded glens of which means sickness and death, and the almost equally fatal Pnom Dang Rek range, constitutes a very striking formation. The Nakon Nayok and Krabin hills sweeping southwards from the Korat plateau to join the Patat range, are as beautiful as dense tropical vegetation and clear mountain streams can make them. The Patat range itself, sometimes cloud-capped and frowning, sometimes clear and smiling above the sea on the Chantabun coast, forms inspiring masses of rock and jungle. Its highest points are Kao Saidao (5,560 feet), Kao Kmock (4,000 feet), and Kao Chemao (3,400 feet). On the slopes of the forest-clad ranges which form the western frontier of Northern and Central Siam, and which roughly bisect the southern part of the country, there is an enormous area of dense forest jungle, the haunt

of elephant, bison, rhinoceros, and other big game, and destitute of human habitation, unless the rude lairs of wild jungle tribes can be so called. Here are limestone cliffs of every colour, grey granite rocks besplashed with gleaming waterfalls, giant forest trees rising from dense masses of undergrowth and roped one to another by cables of monstrous climbing plants, those on the highest elevations festooned with long weepers of moss and exaggerated ferns. In the deep ravines millions of cicadae make the air throb with sound all through the hot hours of day, and at night the murmurings of hidden streams accentuate a silence punctuated at intervals by the clear bell of a stag or the trumpeting of an elephant on the heights above. Here nature reigns supreme and riots through her realm in all the teeming productiveness of the tropics. Several tracks through these mountains give access to the southern parts of Burma, and through them a certain volume of trade passes between the two countries. The highest points of the range, situated at great distances apart, are Kao Phra Wan (5,800 feet) and Mogadok (5,750 feet) situated east of Raheng and Nakhon Sawan, Kao Luang (4,800 feet) in the narrowest part of Southern Siam just below Muang Kuwi, with Kao Prong (4,500 feet) and Kao Luong (5,800 feet), isolated peaks adjacent to the main range and standing close together near the ancient southern city of Nakon Sri Tammarat.

Rivers. *The Menam Chao Phaya* with its tributaries and branches is the only great river system in Siam. Indeed, to the Siamese who live upon its banks and travel upon its waters, this noble river and the plains which it alternately floods and drains, constitute Siam itself, the fact that there are other streams, valleys and plains in their country being scarcely realised by the majority. Far up in the north of the Payap and Maharat Circles, four rivers, the Meping, Mewang, Meyom and Menam, rise among the mountains which



THE MENAM RIVER. UTARADIT, 350 MILES INLAND.



THE MENAM CHAO PHAYA RIVER AT BANGKOK.



THE MEPIING RAPIDS.



THE MAYOM RIVER AT OLD SAWANKALOK.
(Scene of King Phra Ruang's final disappearance.)

lie between the Salwin and Mehkông watersheds, and, flowing southward between the gridiron hill ranges of Northern Siam, unite, the Meping and Mewang at Raheng and the Meyom and Menam at Chum Seng, to form two streams which meet at Paknampoh, some 250 miles from the sources, and together make the Menam Chao Phaya. Of these four rivers the Meping and Mewang to the west, whose sources are at a high elevation, are rapid and generally shallow streams, liable to sudden heavy floods, while the Meyom and Menam to the eastward, rising at a much lower elevation, flow quietly in long, deep reaches, with regular seasonal rise and fall. The western pair are navigable for shallow draft boats only, through the greater part of their length, but the eastern pair are deep enough to allow the passage of large rice boats at all times, and of deep-draft steam launches and other vessels during the high-water season, to points some 120 miles above Paknampoh. The Menam is the largest, deepest and most sluggish of the series, and in many respects resembles the Menam Chao Phaya below the final junction. It passes through a considerable rice-growing district, and consequently has much traffic upon it.

From Paknampoh to the sea, 140 miles as the crow flies, the waters of the Menam Chao Phaya follow a number of tortuous courses. At Chainat, about 35 miles below Paknampoh, a branch is thrown off on the west side known as the Supan, or Tachin, river, which flows parallel with the parent stream to the sea, and lower down a branch known as the Menam Noi, which also flows parallel with the main river, returning to it at Ban Sam Kôk. At Ban Takwai, some 20 miles below Chainat, an eastern branch separates from the main river and, flowing past Lopburi and Ayuthia, rejoins it at Ban Sam Kôk.

The low banks of the different channels of the river, are all thickly fringed with bamboos and tall trees,

shading and half concealing an almost continuous succession of long, straggling villages, here and there swelling to the proportions of a town, and interspersed with innumerable monasteries, temples and pagodas. Every now and then gaps occur through which appear vistas of rice fields, backed by distant trees which mark the bank of another channel of the river, or extending across a wide expanse of level land right to the horizon.

Thus flowing slowly southward, bearing within its turgid depths vast quantities of yellow silt, and upon its broad bosom a multitude of boats of every description, the river, at once a highway, a sewer, and the water supply of some millions of people, at last reaches the capital, and, passing through it, now navigable for sea-going steamers up to 1,500 tons burthen, continues its further winding course of twenty miles to the sea. In the reaches below Bangkok a different scenery prevails. Bamboos and tall palm-trees are fewer or are absent, the banks, now even lower than those above the city, being lined instead with the deep green fronds of the stunted fern-like nipah plant and with mangrove extending back through miles of swamp on either side. Out to sea, between low-lying shores and wide mud-flats, runs the great stream, and, meeting the salt-water, performs its last natural function, depositing its burden of silt upon a great semicircular bar which stretches for many miles across its mouth.

With the exception of the four northern rivers which contribute to its formation, the Menam Chao Phaya has only one tributary, namely the Pasak, which flows south and west through the Petchabun and Saraburi districts and joins the eastern, or Lopburi Channel, a short distance above Ayuthia. The Pasak is a river of some 200 miles in length, and is navigable for boats and steam launches to a point about 25 miles from its junction with the Menam Chao Phaya.

The amount of water discharged by the Menam

Chao Phaya varies greatly with the seasons. At the driest time of the year the volume just below Paknampoh is not more than 150 cubic metres per second, while during the height of the rainy season it amounts at the same spot to fully 2,000 cubic metres per second. At Bangkok in flood-time the discharge reaches 3,500 cubic metres. The waters usually begin to rise in May and continue to do so until about the end of October, when the river is in full flood. Subsidence is gradual, and the lowest level is reached about April. Sudden freshets and high rises are unknown in the Menam Chao Phaya. For fifty miles inland the river is subject to strong tidal influences, the continual scouring effect of which is to make it uniformly deep. The great volume of water discharged during flood-time to some extent overcomes the action of the tide, but during the dry weather the flow extends far inland, when the water in the lower reaches is brackish and unsuitable for drinking purposes.

The Bang Pakong river drains the Prachin Circle east of Bangkok. It rises in the Wattana hills close to the new French frontier, flows north, then west, then south, describing a complete semicircle, and falls into the Gulf of Siam at its north-east corner. The river is about 120 miles long, and for the last fifty miles of its course passes, with many intricate windings, through a low-lying and very fertile rice-growing district. Near its upper waters are situated the Wattana and Krabin gold mines, and on its lower banks stand the thriving towns of Prachin and Petriu. About fifty miles from its source it receives the waters of its principal tributary, the Nakon Nayok river, which drains the small province of that name. Other tributaries are the Sai Cheng, rising at the back of the Patat range behind Chantabun and flowing north, the Taphan Hin and Sai Yai, which descend from the Pnom Dang Rek range on the north, and several smaller streams which water the district encircled by the main river, and which join the latter

at different points on its left bank. Like the Menam Chao Phaya, the Bang Pakong is tidal for many miles inland, but, unlike the former, it is subject to sudden floods which frequently overflow its banks and extend for miles across the flat lands in its neighbourhood. The river is navigable for small seagoing vessels up to Petrieu, and for boats and launches to Prachin.

The Meklong river drains the long valleys that lie between the great western boundary range and its eastern foot-hills ; flows south by south-east, and falls into the Gulf of Siam at its north-west corner. About 100 miles above the mouth, the main river is formed by the junction of two streams, the eastern of which rises not far from Raheng and flows through wild, almost uninhabited country, while the western rises on the Burma frontier near the well-known "Three Pagodas," and flows through a country containing ruins of ancient cities, and now occupied by prosperous communities of civilized Karen. The eastern branch is known as the *Kwaa Yai*, or "Great Stream," and the other as the *Kwaa Noi*, or "Small Stream." Both are rapid, narrow, fairly straight, and navigable only for small boats, shallow draft launches and rice-boats being unable to ascend beyond the junction at any time. In its lower reaches the river Meklong passes the towns of Kanburi, Rajburi and Samudt Sôngkram, and has many populous villages on its banks in the parts that lie between those places. Its waters are clear and its bed is a yellow sand, very different from the soft grey mud of the Menam Chao Phaya. It is subject to sudden floods of short duration, and, on account of its steep slope, is very little affected by sea-tides.

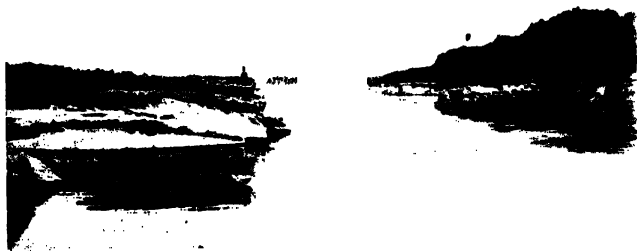
Both the Bang Pakong and Meklong rivers are connected with the Menam Chao Phaya by a series of parallel canals, which cross the Central Plain at right angles to the river courses. These, as their names, *Pahsi Charoen* ("Prosperous Revenues") ; *Damneun*



THE PASAK RIVER AT CHAI BADAN.



FAR UP THE KWAA NOI BRANCH OF THE MEKLONG RIVER



THE MEHKÖNG RIVER.



NEAR THE CONFLUENCE OF THE NAM MUN AND MEHKÖNG RIVERS.
THE FRANCO-SIAMESE FRONTIER.

Sandak (" the Comfortable Kingsway "), etc., imply, were made as means of communication between the capital and outlying districts and towns which were otherwise difficult of access, and they form good highways in a country where roads are impracticable by reason of floods and the difficulty of procuring road-metal. The main canals have all been made during the last 150 years, and many of them, having in course of time become much silted up, have recently been re-excavated and enclosed within locks.

Mé Nam Kông Ka. The Bandon river is the largest stream in Southern Siam. It rises in the Chawang Hills of Nakon Sri Tammarat, not very far from the sea, and flows south and south-by-west ; then, turning west describes a wide semicircle and flows north through the Chaiya district, finally turning east and falling into the Bandon bay. Throughout the greater part of its length it is full of sand banks, but is navigable for small boats to 50 miles from its mouth. The river is rapid and shallow in the upper reaches, but is sluggish and deep and subject to tidal influence for ten miles above the mouth. The town of Bandon lies on its banks some seven miles from the mouth and, eight miles higher up, the Southern Railway crosses it by a large iron girder (unfloored) bridge. It has many tributaries, all of small importance.

The Mekong river, as has already been said, does not now actually pass through any part of Siam, but it is of importance to her as a frontier. It is also deserving of notice as the recipient of the Nam Mun, a river which, with its tributaries, drains almost all Eastern Siam. The small modern towns of Nawng Kai and Chieng Khong are almost the only Siamese places of any interest or importance on the banks of the Mekong. The river, though a magnificent stream, with an enormous discharge and with long reaches of deep, quiet water, is rendered difficult of navigation by the presence of numerous rapids. Efforts have been

made by the French to remove these obstacles, but hitherto with indifferent results, and the Mehkông for purposes of commerce seems practically useless. The Nam Mun, a river more than 300 miles in length, rises on the plateau near Korat and flows east through the wide basin of Eastern Siam to join the Mehkông in latitude $15^{\circ} 20'$, which it does by passing through a narrow opening in the low hills skirting the left bank of the main river. It has a large number of tributaries, one of which, the Nam Si, is of great length. The whole system is subject to high floods during the wet season, while in the dry weather its exit is blocked by the rapids near its mouth. Hence it is not of much value as a means of communication.

Other Siamese rivers of more than insignificant proportions are the Nam Kôh and Nam Ing, northern tributaries of the Mehkông, and the Pattani river in Southern Siam. The Pattani, a broad, shallow, and rapid stream, about 120 miles long, drains the seven small states which constitute the Pattani Circle, or *Monton*, passes through a beautiful and fairly well-populated country, and is reputed to contain deposits of gold. It is very little subject to tidal influence.

Lakes. The lakes of Siam are few and, if the inland sea of Sôngkla be excepted, of small size and of little importance. In the northern part of Eastern Siam there are several shallow meres of wide extent, dry or almost dry during a part of the year and at other times reed-grown swamps, the haunts of innumerable pelicans and other water-birds. The best known of these meres is Nawng Han, near the village of Ramarat, and connected with the Mehkông river by a short stream, the Nam Kun. In Northern Siam, not far from Chiang Rai, there is a small district of lakes and tarns lying amidst high mountains and drained by the Nam Ing river; the largest of these is about three miles long by one wide. The district is not without scenic beauty of a somewhat austere character, and is very sparsely

inhabited. West of Utai Tani and again west of Rajburi, small lakes lie at the foot of the western mountain range in remote jungle districts where man seldom ventures.

Towns. In Siamese there is no word exactly equivalent to the English word "town," the word *Ban* (meaning, as did formerly the English word "village," any collection of houses from a single homestead upwards), being the only word in the language which belongs solely to the habitations of men. Many words are used, however, to denote settlements which are evidently of more importance than mere villages, either because of their size or for other reasons, and of these the most usual are *Hoa Muang*, or briefly *Muang*, the head or centre of a province; *Nakon*, from the Sanskrit or Pali *Nagara*, meaning a country; *Wieng*, the Lao word for a fortified place; and *Krung*, meaning a capital. Settlements dignified with these designations may, however, with the exception of *Krung*, be quite small and insignificant places, owing their superior consideration to tradition of power or greatness, or to their selection as modern administrative headquarters; while others, still known as mere *Ban*, are large and populous communities. It is not easy, therefore, to decide what to call towns and what villages in Siam, the more so since the average English dictionary defines a town as a place larger than a village, and a village as a place smaller than a town. If no place with less than 10,000 inhabitants is a town, then there are not half-a-dozen towns in the country. If, on the other hand, the presence of market denotes a town, then there are almost as many towns as villages in Siam.

There can, however, be no doubt about the Capital, for *Bangkok* is not only a town, but is certainly the largest city in all Further India, having a population of over 350,000. It is situated astride the river Menam Chao Phaya some twenty miles from its mouth, and covers an area of about fifteen square miles. With the

exception of London, there is no other capital in the world the population of which bears so large a proportion to that of the country of which it is the head, for Bangkok contains seven and a half per cent. of the people of Siam. Up to a few years ago, this city resembled nothing so much as a huge wen which had been growing steadily for a century and a quarter, absorbing the life and the substance of the country, taking the revenues of its outlying provinces to pay for its own embellishment, and the best blood of the peasantry to fill the households of its nobles or to rot in the insanitary barracks of its naval and military establishments. At the present day, however, this is no longer the case. With the abolition of slavery, the nobles have disbanded the greater part of their following; new laws have immensely improved the conditions of military service, while a policy of partial decentralisation of government, and, above all, of railway extension, has brought the outlying parts of the country into a prominence not formerly imaginable, and is teaching the upper, that is, the official classes, that life may, after all, be made endurable elsewhere than in the beloved capital. Even so, however, Bangkok still overshadows the rest of the country to an extraordinary extent, and both Siamese and foreign residents and visitors are still too apt to think that to all intents and purposes the capital is the only part of the country which counts.

Prior to 1769, Bangkok was an unimportant place near which stood one of the forts intended to guard the riverine approaches to Ayuthia, the former capital. In or about that year, however, it was selected as the headquarters of the army engaged in recovering Siam from the Burmese, from which time it grew rapidly and soon became the largest town in the country and the seat of government of the reorganised state. In 1782 His Majesty Rama I (Somdet Phra Putayot Fa) definitely fixed upon the place as his capital, and since



A RIVERINE TOWN, CENTRAL SIAM.



A CANAL IN BANGKOK



A BANGKOK WATERWAY.

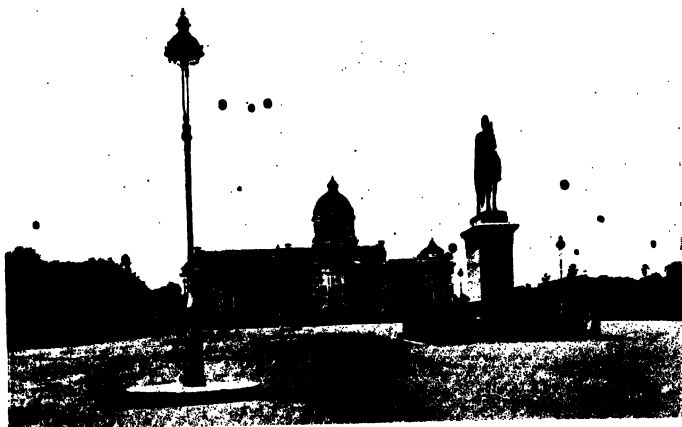
that date, indissolubly connected with the fortunes of the dynasty he founded, it has prospered until, far surpassing all former capitals, it has become the greatest city the country has ever at any time possessed. In its earlier years Bangkok was built very largely upon, or close beside, the river and the innumerable creeks and canals which were excavated with some degree of system at varying distances surrounding the Royal Palace. The houses were either constructed on floating pontoons moored at the sides of the water-courses, or on high piles driven into the mud-banks. The Royal palaces occupied a large area in a bend on the east bank of the river, and the best land sites all round these were devoted to the erection of pagodas and temples, mostly of brickwork, and many of them of beautiful and elaborate design. The dwelling-houses were built of light material and usually had thatched roofs, those of the princes and higher nobles being generally, however, more solid structures of teak-wood, often richly carved, and with high roofs made of tiles. There were practically no roadways, all communication being by water. About the year 1880, however, the necessity for roads began to make itself felt, and there was constructed a street some five miles long, connecting the neighbourhood of the Royal palaces with the foreign consulates and European dwellings and places of business which lined the east bank of the river below the city. Since that time the making of roads has continued, slowly at first but more rapidly later, so that to-day there are over a hundred miles of well-laid out streets, crossing the old canals at a thousand points and lined with neat brick-built houses in which the erstwhile riparian population now resides. The streets are well-paved and metalled, and are kept clean, those nearest to the Palace being in the best condition, as being the most likely to catch the eye of royalty. They are continually crowded with traffic of all kinds, thousands of jinrickshaws, hundreds of

horsed carriages and motor vehicles continually passing to and fro. Here and there a row of the older thatched dwellings persists, and a few floating houses still cling to the banks of the river and the principal creeks, but these are doomed to early extinction. The picturesque castellated fortifications of the city are going also, the gateways have nearly all been removed to facilitate traffic, and whole sections of the walls have been demolished and utilised as road-metal. Before long Bangkok will be a city of bricks, but it will be also a city of trees, the verdure of which, together with the graceful spires and bright-coloured roofs of its religious and public buildings, will always redeem it from the monotony of appearance which characterises many cities of the West.

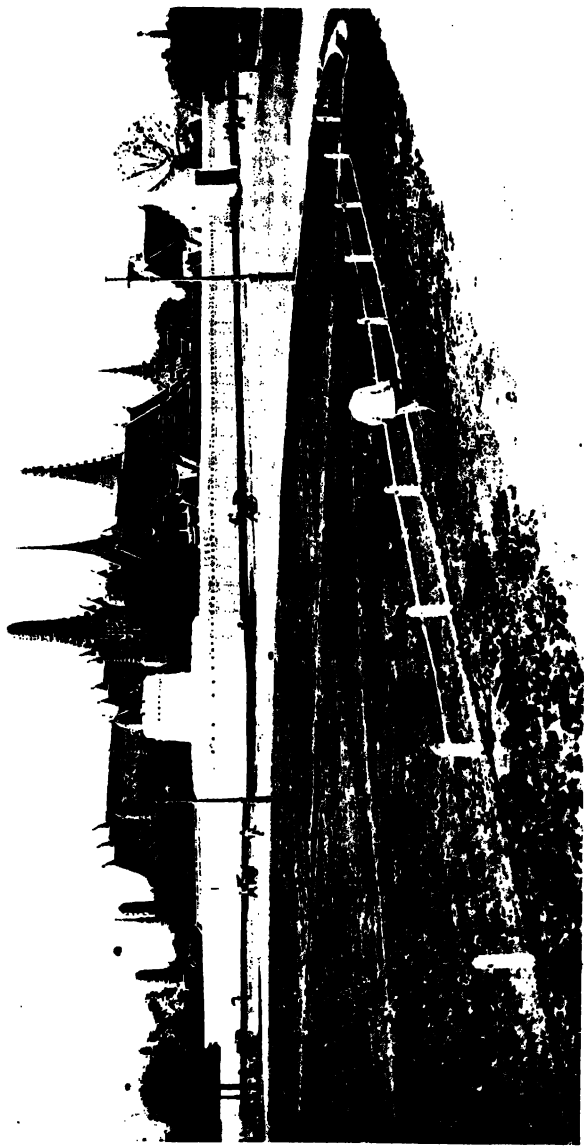
North of the city an extensive park was laid out a few years ago, in the centre of which the late King built for himself a small palace to which he could periodically retire to enjoy the pleasures of country life. The park, which is called *Dusit*, or "the Paradise where all desires are fulfilled," after the fourth heaven of the Buddhist cosmogony, is now a place of shrub-berries, ornamental waters, small artificial hills and kiosks, intersected by well-kept walks and carriage-drives lined with avenues of tamarind and other trees. The summer palace has grown into a great enclosure containing many fine buildings, in which the Court now resides almost permanently, and a magnificent Audience Chamber, while, at a distance round about it, stand many beautiful villas, the palaces of the more important princes and nobles. A boulevard, about two miles long and some 200 feet wide, lined with trees and crossing three canals by means of handsome marble bridges, connects the Dusit Palace with the Grand Palace in the city. This last, a maze of delicate spiral roofs, flashing with gold and silver and overtopping white castellated walls, with surrounding green lawns, stately avenues, white roads and imposing temples and public



"NEW ROAD" IN THE CITY, BANGKOK.



STATUE OF RAMA V AND AUDIENCE CHAMBER, DUSIT PARK.



GRAND PALACE ENCLOSURE.

buildings, forms one of the most remarkable sights of the Far East.

The European residential quarter is to the south and south-east of the town, where many of the foreign consulates, now nearly all raised to the condition of Legations, have been, or are being, rebuilt. All the main streets are lined with shade-trees, and provided with electric tramways, while the whole town is lit by electricity.

The absence of good drinking water was until recently a perennial difficulty in Bangkok, and was the chief cause of the very bad sanitary reputation of the place in former years. The difficulty has now been removed, and the public health very greatly improved by the installation of a modern system of water-supply that has proved entirely successful.

The reach of the river immediately below the town constitutes the Port of Bangkok, where steamers, sailing ships, and lighters lie at anchor, half hidden in the smoke of numerous rice-mill chimneys standing on either bank.

The quarter known as Sam Peng, just outside the southern face of the old city walls, is a place of much interest. It is the Chinese quarter, and its inhabitants built it up in close resemblance to a section of an old Chinese city. The houses, of every size and shape, stand as close together as possible, and, until a short while ago, the only streets were narrow alleys, often not twelve feet wide, where crowds of people hurried up and down all day, and where the lives and property of strangers were scarcely safe at night. Almost every house is a shop of some kind, and an immense amount of trade is carried on in the quarter by a population herded together under sanitary conditions that leave much to be desired. Of late years several broad streets have been driven right through this settlement, and measures have been taken to exert both sanitary and police control over the inhabitants, but the neighbour-

hood is still the haunt of disease and crime, and its condition, though much improved, is not exactly a credit to the administration of the city.

Chieng Mai, situated in Northern Siam is, in importance, if not in size, the second town in Siam. It stands at an elevation of 800 feet above the sea, on the right bank of the river Meping, one of the northern branches of the Menam Chao Phaya, in $18^{\circ} 46'$ N. latitude, and $99^{\circ} 0'$ E. longitude. The place was founded in the 11th century A.D. as a capital of a small Lao State, which subsequently acquired sway over the other principalities of the neighbourhood and became the centre of a somewhat loosely-constituted kingdom. All through the Middle Ages and down to the beginning of the 19th century Chieng Mai, as the first city of this kingdom, was exposed to endless vicissitudes; its rulers being consistently claimed by both Burma and Siam as their vassals, and frequently compelled by force of arms to transfer their allegiance from one to the other of these great rivals. The town is surrounded on three sides by massive walls and ramparts, now fallen into decay, and has a walled enceinte rather over a square mile in area, within which are the palace of the Chao or hereditary Chief of the State, the houses of his principal adherents, and a number of temples. It is the headquarters of the Viceroy of the North, and also of a division of the Siamese army. The population, which is about 30,000, mostly Lao, lives in neat houses lining well-laid out streets, and along the banks of the river. A water supply is obtained from a hill near by, from which the encircling moats and a series of water-courses within the town are supposed to be filled with water, and the river is spanned by two wooden bridges, the more recent of which is a very fine structure. The foreign community is composed of members of an old-established American Presbyterian Mission, and of the employees of several European firms engaged in the teak trade. British and French Consuls, whose districts



ANCIENT FORTIFICATIONS AND MOAT, CHIENG MAI.

• [See also Vol. II, p. 181] •



ANCIENT DEFENSIVE BRICK WALL AND RAMPANT, NAN, NORTHERN SIAM. •

• (Interior face.)

[See Vol. II p. 181]



FLOATING HOUSES AT AYUTHIA.

extend over all the Northern Siamese Lao States, reside here, and there are also many Burmese timber and general merchants established in the place. There are a few Europeans in the Government Service; railway, medical, forest, survey and gendarmerie officers. On the east side of the river are situated the grounds of the American Mission, the well-laid out military cantonment, and an excellent race-course and polo-ground.

Puket, also called *Tung-kah*, meaning "The Plain of *Kah*" (lalang grass), but by Europeans miscalled *Tongka*, lies in $7^{\circ} 50'$ N. latitude, and $98^{\circ} 24'$ E. longitude, at the south-east corner of the island of *Thalang*, or *Junk Ceylon*, off the west coast of Southern Siam. The place has long been known to the outside world on account of the rich tin mines that exist there. The colonists from the shores of India who worked the mines some 2,000 years ago were possibly the founders of a town here, and eight or nine hundred years later, as has been said above, Arab traders who came to share in the mineral wealth of the island settled here. About the 15th century A.D. the attention of Chinese merchants was drawn to the mines, with the result that a colony of Chinese miners sprang up, which has continued down to the present time. The present town, however, is comparatively modern, having been built to replace the old one, *Ta Rua*, after the latter was destroyed by the Burmese in the first years of the 19th century. It is the headquarters of the Lord Lieutenant of the *Puket Circle*, and is in no way remarkable except for the enormous deposits of tin around and below it. The population, which amounts to about 30,000, consists chiefly of Chinese. There are a few Europeans engaged in the tin-mining industry. An Australian company has been organised to dredge tin from the bottom of the sea close to the town, which it is doing with considerable profit, and other promising dredging propositions have recently been undertaken.

The town is compact and well laid out. A British vice-consul has his headquarters there, and there is a branch of the Chartered Bank of India.

Ayuthia, hitherto known colloquially as *Krung Kao*, or "The Old Capital," stands on the eastern branch of the Menam Chao Phaya in 14° 21' N. latitude, and 100° 32' E. longitude. The river is here broken up into a network of creeks and marshes, in the midst of which stands an island covered with the ruins of pagodas, temples and palaces, the remains of the once proud city which played so great a part in the history of Siam. In the earliest records the place appears under the name of Dvarapura¹, or Dvaravati, as the capital of a small state which existed from 469 A.D. to about 650 A.D., and then disappeared amid the continuous and kaleidoscopic political changes of the time. About 1189 A.D. it emerged once more as Nong Sano or, Nong Sarnao, known to Arab travellers and to the compiler of the *Malay Annals* as Shahr-i-Nao, or Shaher-al-Nau, the capital of a State embracing all Central and Southern Siam. At this time it rose to a considerable degree of prosperity, but, again declining, faded away and had fallen into insignificance when, in 1350, it was overthrown and replaced by the city of Ayuthia. The old name Dvaravati survived all vicissitudes, and is used frequently by historians, as for instance by Symes in his *Account of an Embassy to Ava in 1795*, who gives it as one of the names by which the later capital of Siam was then still known to the Burmese. Ayuthia, was twice destroyed by the Burmese, once in 1555 A.D., and again in 1765, after which latter date it ceased to be the capital of the country. The modern town consists chiefly of houses built of light and perishable material, clustering on the banks of the ancient creeks or erected on floating pontoons. The Lord Lieutenant of the Ayuthia Circle has his headquarters here, and there is a museum containing a good collection of objects of much archeological value recovered from the adjacent

ruins. The government offices, jail, hospital, market and railway station are all good, commodious buildings. A few miles of fairly good roads have recently been constructed, but communication is still chiefly by water. Ayuthia is connected by rail and river with Bangkok, forty-two miles distant, and has a considerable trade with the capital. The population, about 12,000, is largely devoted to agriculture, but there are also many shopkeepers. Under the new military arrangements, Ayuthia is the headquarters of a division of the army.

Châ Cherng Sao, or Petriu, on the Bang Pakong river, and connected with Bangkok by rail, is a town of rising importance. Situated in the centre of a fertile district, its rice trade is growing fast, and several rice-mills have within recent years been erected there. The population, which is about 6,000, is Siamese, with a strong admixture of Chinese.

Chantabun, a few miles up the river of that name, which falls into the sea, not far from the south-east extremity of Siam, is a small town which, though a very old settlement and of some historical importance, is chiefly remarkable in these modern times for having been occupied by a French garrison from 1893 to 1905 as a check upon supposed Siamese aggression on the eastern frontier. The town is the centre of a small trade, more especially in pepper, and is the seaport for the gem-mining district situated further inland, the greater part of which, however, now belongs to French-protected Kambodia. The population is mixed to an extraordinary degree. Many of the inhabitants are Annamese Roman Catholics, the descendants of refugees from aforesaid Christian persecutions in Annam. Others are Shan and Burmese attracted to the neighbourhood by the gem mines, while there are a good many Kambodians from across the neighbouring frontier. Chantabun is the headquarters of an administrative Circle.

The present terminus of the north-eastern railway, the oldest line in the country, is *Korat*, 164 miles from Bangkok, an ancient walled town on the uplands of Eastern Siam. The population, now about 12,000, consists of Siamese, Eastern Lao, and 'Kambodians. The official name of the place is *Nakon Raja Sima*, or "the Frontier Country," and, lying between Siam and Kambodia, it was formerly subject to periods of Kambodian supremacy. Occasionally, also, it profited by disturbances in the surrounding states to assume independence, but it was finally reduced to order and incorporated with Siam on the opening of the Bangkok era. It is now the headquarters of the Korat Circle, of a military division, and of a French vice-consul. It is the centre of a fairly prosperous silk-weaving industry, and has a growing trade with Bangkok, chiefly in livestock.

Ubon, in far-distant Eastern Siam, is a town of some size and importance, but, owing to imperfect communications, is almost unknown to the outer world. It is situated on the *Nam Mun*, about thirty miles from the spot where that river falls into the *Mehkông*, and has a population of about 7,000 inhabitants, most of whom are the Eastern Lao race. During about three months of the year small steamers reach Ubon from the *Mehkông* river and from *Korat*. At other times the only communication is by a rough cart track of about 240 miles from *Korat*. Nevertheless, the place has a considerable local trade, and the shops usually have a good stock of foreign cloth, hardware, etc., almost all imported via *Korat* from Bangkok. This town will shortly be connected by rail with *Korat*. Ubon is the headquarters of a civil administrative Circle, of a division of the army, of a French vice-consul, and of an old-established branch of the Roman Catholic Mission to the Lao. The town is clean and well laid out, and many of the houses are constructed of brick. It has neither ancient walls

nor monuments, and is of no particular historical importance.

Of the smaller towns in Northern Siam, *Pitsanulok* is of historical interest, and is of some importance as the headquarters of a civil Circle and military division, and as a centre of agricultural activity. *Raheng*, on the Meping, is a timber station, and the starting-point of a Burmese trade-route. *Paknampoh*, at the junction of the rivers of Northern Siam, acquired some importance when the railway reached it, but is declining since the line was carried further north.

Ang Tong and *Saraburi* are small towns in Central Siam with a fair amount of trade, the former in paddy and the latter in livestock and other produce from Eastern Siam. *Phrapatum* (by a recent edict renamed *Nakon Patom*) and *Rajburi* (sometimes written *Rajaburi*), in the south-west of Central Siam, are interesting, both on account of their past history and their present activity. The former is the site of a favourite country residence of the King.

On the eastern shores of Southern Siam, *Nakon Sri Tammarat* (sometimes called *Lakon*), *Songkla* and *Pattani* are places of some note. The first, known to Europeans as *Ligore*, probably a Chinese corruption of *Lakon*, is an ancient walled city of historical importance as the capital of an erstwhile powerful Siamese sub-kingdom, which, towards the close of its long and eventful history, played a considerable part in the drama precedent to the formation of the British Colony of Penang. *Songkla*, by Malays called *Singgora* and as such known to Europeans, was originally founded by Chinese pirates, who, after settling there and in time degenerating into mere peaceful traders, were, in their turn subjected to piratical attacks, wherefore they fortified themselves with a fine stone wall within the shelter of which a flourishing town grew up. The days of pirates passing away, the Chinese head of the community received recognition from the Court of

Siam and assumed the dignity of a local chieftain or Raja. His descendants are now pensioners of the State, and, under a Siamese Governor, the place is the headquarters of the Viceroy of the Southern Provinces, the terminus of a branch of the new Peninsular railway, and the centre of a lively trade in rice and other products. The town is beautifully situated at the entrance of the great lake, or inland sea, to which it gives its name. It is large and well laid out, but has no buildings or monuments of note. The streets are paved with excellent metal, obtained by demolishing the old pirate-proof walls. The population is about 5,000. Pattani is the chief town of the only remaining Siamese Malay province on the east coast of the peninsula. It has a population of about 6,000, and is chiefly remarkable for its excellent roadstead, now to some extent silted up, which was doubtless the cause of its being made a rendezvous by European traders to the Far East in the sixteenth and seventeenth centuries, during which times there were Portuguese, British and Dutch factories there. It is the headquarters of an administrative Circle.

Sukhothai, Sawankalok, Kampengpet, Nakon Sawan, Supanburi, Lopburi and Chaiya, the sites of ancient capitals and fortified places in various parts of the country, are all of much historical and archaeological interest, but as modern towns are of no importance.

CLIMATE AND METEOROLOGY.

Temperature. The temperature of Siam, though the country lies entirely within the northern tropic, is considerably affected by peculiar local conditions, and therefore varies very perceptibly in different localities. On the plains of Central Siam, between the months of February or March and October, the sea wind blows from the south or south-west almost continuously, mitigating the heat of the days and rendering the

nights comparatively cool. During this period, which comprises the hot and the rainy seasons, the temperature rarely rises above 98° Fahr. or falls below 79° Fahr. From the end of October to February, the so-called cold season, the wind blows from the north-east, when the maximum temperature may reach 92° Fahr., and the minimum fall as low as 57° Fahr. Formerly the climate of Bangkok city was very similar to that of the surrounding plains, but during the past few years a change has become noticeable. Sir John Bowring, in his book on Siam, written in 1856, gives statistics of the temperature of Bangkok over the period 1840 to 1847, during which the maximum temperature registered was 97° Fahr., and the minimum 54° Fahr. Observations of a somewhat later date give results very similar to the above, but the statistics of the last ten years or so show an almost continual increase in the average daily range, and, at the present time, while the minimum temperature remains much as it used to be, the maximum reaches 100° to 104° Fahr., each year during the hot weather, and about 95° Fahr. during almost every month of the other seasons. The causes of this climatic change have not hitherto been explained, but it is possible that they may be found in the increase of population, in the substitution of bricks and tiles for timber and thatch as house-building materials, or in the draining of marshes in and around the city.

In Northern Siam, owing to the absence of the sea breezes, and to greater radiation, intense mid-day heats followed by cool nights are the rule, the mean maximum standing about 3° higher and the mean minimum about 4° lower than on the plains further south.

The wide, shallow basin of Eastern Siam, cut off by its surrounding hills from the cooling breezes from the south and east, and with its bare laterite soil exposed to the full heat of the sun, is subject to terrific heats,

which scorch up the land, burn off the thin vegetation and reduce great tracts of country to charred and arid wastes, while the wide range of daily temperature caused by excessive radiation renders the climate generally unhealthy. In the cold season the night temperature is very low in this region.

It is in Southern Siam that the mildest climate and also the lowest average range of temperature prevails. There, with sea winds blowing across the peninsula alternately from west and east, the thermometer rarely falls below 68° Fahr., and scarcely ever rises, even at the hottest time of the year, above 95° Fahr., the daily range seldom exceeding 14° Fahr., and often during the wet season amounting to no more than 3° Fahr.

In Central, Northern and Eastern Siam there are three distinct seasons—the hot weather, the rains, and the cold weather. The first extends from February or March to May, the second from June to October, and the third covers the remaining four months of the year. When the north-east winds blow strong, the cold weather is very marked, and, though the actual temperature is not below the average summer heat of Europe, causes some inconvenience to the people of the country. At times, however, the seasonal winds fail, and when this happens the cold weather is scarcely to be distinguished from the hot. In the lower part of Southern Siam there are two seasons only—the hot weather, which lasts from February to August, and the rains extending from September to January, the height of the wet season falling in December, a month which is almost invariably without rain in Central Siam. South of the town of Chumporn there is no cold season, but occasionally the thermometer may fall just below 68° Fahr. for one or two nights in January or February.

Rainfall. The rainfall of Siam varies a good deal in different parts of the country. In Southern Siam

and on the Chantabun coast the average is not far short of 100 inches for the year ; in Northern Siam it is about 60 inches, and in the neighbourhood of Bangkok about 50 inches. At the British Consulate, the headquarters of the American Missionaries, and at the offices of one or two business firms, rainfall records have been kept since the middle of last century, while the Ministry of Agriculture has established recording stations all over the country from the returns of which it has compiled a fairly accurate statement annually since 1908.

The comparative smallness of the rainfall in Central Siam is undoubtedly due to the influence of the great western mountain ranges, which gather the clouds of the south-west or rain-bearing monsoon, and cause the precipitation on their summits, and slopes of the greater part of the rain which would otherwise be distributed more equally over the whole country. The rainfall is not entirely confined to the wet season, for in the neighbourhood of Bangkok showers fall at intervals during the cold and the hot seasons, while towards the west and in Southern Siam the fall amounts sometimes to several inches during each of the hot weather months. Snow never falls anywhere in Siam, not even upon the highest mountain peaks of the north, but hailstorms, though of very rare occurrence, are not altogether unknown. The beginning of the wet season is usually heralded by a series of severe squalls and thunderstorms, accompanied by heavy rain, which sweep down from the western heights, and sometimes cause damage to property on the plains. During the months of September and October, heavy gales almost of cyclonic violence are met with in the Gulf, but accidents to the shipping constantly plying there, to and from Bangkok, are rare. Waterspouts are occasionally seen, both at sea and over the flooded marshes of the plains. At the lower extremity of Southern Siam, in the districts bordering on the

British-protected Malay States, the memory of a devastating cyclone, which caused great destruction of property about fifty years ago, still remains with the country-people, who refer to it continually when fixing the dates of occurrences in the lives of the last two generations.

SCIENCE

FLORA

THE Flora of Siam is a subject which has hitherto received scant attention, either from the Siamese themselves or from botanists of other nationality. A few lists of plants in the vernacular recorded for their medicinal or supposed magic qualities, and occasional papers from peripatetic scientists; at present constitute almost the only literature touching the matter, and it is probable that there are not more than two or three individuals actually residing in the country who have given more than the most cursory attention to this important subject. It is said, however, that these two or three, who have hitherto devoted their attention chiefly to particular districts of Northern Siam, are about to give the outcome of their investigations to the world in book form.

Owing to the physical nature and geographical position of the country, the Flora much resembles that of Burma in Northern Siam, and that of Malaya in the western parts of Central, and throughout Southern, Siam, and hence a general idea of the Siamese Flora may be obtained from a study of the botanical works concerning those adjacent countries. The classification of plants peculiar to the country, of which there is doubtless a large number, presents an attractive field for the energies of future enthusiasts, pending whose coming the botanical secrets of the country, some of which are possibly of much economic value, remain undisclosed.

The Siamese Flora is almost entirely tropical, for it is only upon the upper slopes and summits of a few of the highest mountains that plants peculiar to

temperate regions are to be found, and even there only a few species are represented, intermingled with the tropical forms. The tropical Flora is, however, very large and comprehensive, for the natural features of the country, the low-lying seashores and the swamps, marshes, meres and creeks of Central Siam, the rivers, hills and mountains of Northern Siam, the hot, dry uplands of Eastern Siam, and the humid atmosphere of the mountains, valleys and plains of Southern Siam, provide all the various conditions most favourable to the growth of plants of widely different nature and requirements.

The following list of the botanical orders represented in the Flora of the country sets up no claim to anything like completeness, but it is possible that, in the absence of any other, it may occasionally be of use where the more elementary aspects of the subject are concerned.

Angiosperms. Dicotyledonous Orders.

The *Ranunculaceæ* are a very poorly represented order, having apparently no members in any part of Siam except the north, where, amid the semi-temperate vegetation of the upper slopes of the higher mountains, species of Crowsfoot and Clematis occur. A small Clematis, rather like Traveller's Joy, is cultivated in gardens in the south, but is not indigenous.

Of the order of *Magnoliaceæ*, the chief example is the Champac (*Michelia champaca*), of which two species, with yellow and white flowers respectively, are common in Southern and Central Siam, and are largely cultivated in gardens for their sweet-scented flowers.

The *Anonaceæ* are widely diffused. The Custard-apple in Northern, Central and Eastern Siam, and the Bullock's Heart in Southern Siam, are common fruits, while several species of *Artabotrys* grow wild in the jungles of the latter part, and are cultivated in all parts of the country for their fragrant but insignificant-

looking flowers, and for their handsome foliage, as trees, climbers and shrubs.

The waters of Central Siam abound with species of the order *Nymphaeaceæ*; *Nymphaea Lotus*, the White Waterlily, and *N. rubra*, a variety with beautiful deep red flowers, also species with blue and with rose-pink flowers, are common throughout the country, one or more species being present in almost every piece of permanent standing water.

The tall *Nelumbium* Waterlily, locally known as *Dauk Bua* or *Prathum*, and in English as the Sacred Lotus, also belonging to the *Nymphaeaceæ*, is found in the muddy shallows at the edges of rivers, and in many marshes and ponds of Central Siam, which are beyond the reach of sea water. Its beautiful rose-pink blossoms, which stand up well above the surface of the water, are very much admired by the Siamese, and, as a sacred emblem of Buddhism, are constantly reproduced in paintings, wood-carving and metal-work. The roots and seeds are used as food, and the leaves, which are peltate and almost round, sometimes take the place of dishes. The petals of the flowers are much used as the outside wrappers of native cigars.

The order *Cruciferae* does not appear to be represented in the wild state at all. A few species are cultivated for the oil of the seeds or for the edible qualities of the leaves, stems or roots. The Cabbage and other allied plants of the order are difficult to raise in Central, and impossible in Southern, Siam.

The *Violaceæ* are represented by a small Dog Violet, which is found occasionally on the slopes of the higher mountains of Northern Siam, appearing in clearings after the crops of hill-rice have been reaped, and by species of the genus *Alsodeia*, an arborescent plant with small, regular flowers, which is common in Southern Siam. The scented English Violet can be grown with ease in gardens in Northern and Central Siam.

Of the order *Guttiferae* the genus *Garcinia* has several species in Siam, principal among which are the Mangosteen and the Gamboge. They are all trees with smooth, leathery leaves, and more or less coloured, resinous juice. The fruit of at least three species indigenous to Southern Siam is eaten, but none of these can compare with the cultivated Mangosteen, considered by some to be the most delicious fruit in the world. Extracts from these plants are used in Medicine as astringents.

The order *Dipterocarpaceae* includes many forest trees native to Siam, at least three genera being represented. *Dipterocarpus obtusifolius* (Mai Hieng), *D. turbinatus* (Mai Yang), *D. Alatus* (Mai Yang), *Shorea obtusa* (Mai Teng), *S. Siamensis* (Mai Rang) and *Hopea odorata* (Siamese, Mai Takien ; Malay, Changal) are a few of the best-known species. Several species together form the predominant vegetation in certain forests called *Pa Paa*, which can be easily distinguished by the peculiar aspect lent them by the trees of the order. Many of the species are valued for their timber, oils and resins. *Hopea odorata*, after teak the finest timber tree in the country, is widely distributed. A valuable paper on this order is to be found in the *Journal of the Siam Society*, Volume VIII.

The order *Malvaceae* is largely represented. *Hibiscus* of many species grow wild, and others are cultivated for their beautiful flowers. *H. esculentus*, the "Ladies' Finger," is one of the commonest of table vegetables. *Bombax malabaricum*, a tree which grows to an immense size in Central, Northern, and Eastern Siam, producing brilliant red flowers and pods containing a coarse cotton, is of frequent occurrence. Several species of *Gossypium*, though not apparently indigenous, are cultivated. A large herbaceous mallow with conspicuous yellow flowers is a common wild plant in the fields and open lands round villages, and there are several other species, some of which grow into large

semi-woody shrubs. Lastly, the "Durian," a great tree, the fruit of which is much prized, is cultivated in Southern and Central Siam, but is absent from the Northern and Eastern districts.

The order *Oxalidaceæ* includes a few small plants, the commonest of which is *Oxalis corniculata*, a weed with trefoil leaves and small yellow flowers, which grows in great abundance on waste lands, in gardens, and in the rice fields after the crops have been reaped.

The *Rutaceæ* (sub-order *Aurantiaceæ*) comprise the Bael, the *Citrus* or Orange family, and the Woodapple. The first and last are found wild in Southern and Central Siam, and possibly in the other parts as well, while the Orange family is represented by a great number of cultivated species and varieties. Bael fruit is eaten as a preserve, and is used in medicine as an astringent, and the Woodapple (*Feronia elephantum*) provides a very hard timber. Of Pummelos, Limes, Lemons and Oranges, each district produces its own varieties, all of which differ more or less from the fruits of this widespread genus which are known in Europe.

Southern Siam contains many species of the order *Meliaceæ*, of which the Langsat and the Rambutan, cultivated for their fruits and apparently indigenous in the country, are perhaps the best known. *Melia azedarach*, sometimes called the Persian Lilac, is also common, and many large trees found in the jungles of the south and in the west part of Central Siam also belong to this order. The Nim, a tree of the *Meliaceæ*, the bark of which yields a medicinal extract useful in cases of fever, is frequent in the jungles of Northern Siam.

The order *Rhamnaceæ* is represented in Northern, Central, and Western Siam by the *Zizyphus jujuba*, a bushy tree, very thorny, with small, round, smooth leaves, and bearing annually a large quantity of fruit rather bigger than a cherry, and of a yellow or rosy

colour when ripe. The fruit is edible, but is not of much account. The tree grows wild in great profusion in the plains and open country, but is not found in the thick jungle, and is rare in Southern Siam.

The order *Sapindaceæ* includes species of trees the fruits of which make a lather with water, and are therefore used as soap. Several species are common in Northern and Central Siam. The order also includes the Lychee or Litchi and the Lam Yai, both cultivated for fruit, and the latter possibly peculiar to Siam, and several closely allied wild species. *Cardiospermum halicacabum*, a very common climbing herbaceous plant, remarkable for the large inflated capsules enclosing its fruit, also belongs to this order.

The *Anacardiaceæ* include the Mango, which is cultivated in endless variety in Northern, Central and Eastern, but scarcely at all in Southern, Siam, though of the many indigenous wild species which inhabit the country the greater number are native of the South. A common wild mango is found as a tree of great size in many of the forest districts, and is quite distinct from the mango which has escaped from cultivation and become wild in the neighbourhood of villages. The varieties called "Pauh" and "Machang" or "Bachang" in Malay, with very inferior fruit, grow almost, if not quite, wild in Southern Siam, where they both appear to be indigenous. The *Spondias mangifera*, which is known to the English in India as the Hog-plum, is a native of the jungles of Northern, Central and Eastern Siam, while *Bonea*, or *Mangifera oppositifolia* (Siamese, *Ma Prang*), well known as the Mayan, or Marian, tree in Burma, a fine tree bearing apricot-coloured fruit having an agreeable acid-sweet flavour, is cultivated in the fruit gardens round about Bangkok. In Central Siam the Mango has been developed by cultivation into a great number of varieties, the fruit of which rival the best Indian and Burmese kinds. *Anacardium occidentale*, a small,

untidy-looking tree, very common in Southern Siam, more especially in sandy soil, has a peculiar fruit formed of the much-enlarged floral receptacle with a hard, kidney-shaped seed attached to the end of it and quite exposed. This fruit, called *Ma Moang Himapan*, or "Fairy Mango," has a delicious scent when ripe, but makes poor eating. Several wild species of the genus *Melanorrhoea*, belonging to this order, are indigenous and yield valuable wood-oils, much used for making pitch, varnish, etc.

The order *Leguminosæ*, with its sub-orders *Papilionaceæ*, *Caesalpineæ*, and *Mimoseæ*, is largely represented in Siam. The first sub-order includes the Indigo, the *Crotalaria* and a host of vetches, beans and pulse, both wild and cultivated, and also the *Clitoria ternatea*, the "Mussel-shell creeper," a delicate climbing plant with flowers, blue, purple or white, resembling a large sweet-pea, which grows wild in profusion in Northern, Central and Eastern Siam, but is rarely seen in the South. The second sub-order contains the *Caesalpinia pulcherrima* (Siamese, *Hang Nok Yung*), grown in all gardens, the Tamarind (Siamese, *Makham*), a most graceful tree, with fine pinnate leaves, small fragrant flowers and a bean-like fruit, edible though very tart, a tree much used for shade purposes and common in Northern, Central and Eastern Siam, though comparatively rare in the South. The Flame-of-the-Forest (*C. regina*), a large tree, said to have come originally from Madagascar, and closely allied to *C. pulcherrima*, has long been grown in Siam, where its beautiful flowers are much admired. The tree is quite acclimatized, many specimens of great age are to be seen, and in a few places it has apparently escaped from cultivation and become wild. The genus *Bauhinia* has indigenous representatives in all parts of the country. Some of these having handsome red, pink, yellow or white flowers, have been brought into cultivation in gardens, but many species are still found only in the

wild state. They vary considerably in appearance, some being large trees, some shrubs, and others non-woody plants. All, however, have markedly ovate leaves. The sub-order *Mimoseæ* includes the Sensitive plant, very common and troublesome as a weed on waste lands, and many Acacias, of which Cutch, a native of the northern forests, yields a valuable dye. *Pithecolobium dulce* (Siamese, *Makham Tete*), a shrubby tree belonging to this sub-order, and of Central American origin, is common in Central Siam, where it is used for ornamental hedging. It has small leaves, and a curious twisted pod containing black seeds embedded in a white or rosy-coloured pulp, which is eaten when the fruit is ripe. The plant is to be found in many parts of the riverine districts, and is well established in the wild state.

Siam having no temperate region, is not well-off in plants of the order *Rosaceæ*. The genus *Rosa* is represented by two species of wild rose found on the northern heights, one a scandent plant with large white flowers, and the other a diminutive shrub of inconspicuous bloom. Efforts are made to cultivate different varieties of rose. A few of the more common sorts do very well in and around Chieng Mai, but elsewhere attempts are seldom attended with any degree of success. In Bangkok and Central Siam generally, the common China Rose manages to exist, and one or two other kinds appear to be to some extent acclimatized, but the flowers produced are usually poor, the plants degenerate very rapidly, and their extreme liability to the ravages of insects and of disease makes their cultivation scarce worth the time and trouble that it entails. Of the genus *Rubus* there are two or three species of Raspberry found on the hill slopes of the north; *Fragaria* is represented by a small yellow-flowered strawberry which grows in old clearings on the highest mountains only; of *Drupaceæ* there are no species known, but the sub-order *Pomaceæ* has one

species of apple and one of pear, grown in the villages of some of the northern hill-tribes, and of a most inferior quality. There is a small shrubby tree belonging to this last sub-order which is common on poor, sandy ground in Central, Eastern and Southern Siam, having large thorns, unattractive yellowish-white flowers, and a hard fruit resembling a small quince, but quite inedible.

The order *Myrtaceæ* includes the Guava (Siamese, *Farang*), a bushy tree supposed by some authorities to have been originally introduced into the East from America, but now so far dispersed over Siam and neighbouring countries as to appear indigenous there. The *Eugenia*, or *Jambosa*, which belongs to this order is much cultivated, more especially in Central and Southern Siam, where at least three species are grown for the sake of the somewhat insipid and watery fruit. *E. malaccensis* has large glossy leaves and ornamental crimson filamentous flowers. In *E. alba* the flower filaments are pale yellow. De Candolle gives all species of *Eugenia* as natives of Southern Siam and the Malay Peninsula. *Eugenia caryophyllata*, the flower-buds of which, when dried, constitute the cloves of commerce, is a plant which thrives in Southern Siam, and is probably indigenous there. Belonging to this order, according to some authorities but not to all, is the Pomegranate, cultivated in Siam, as elsewhere in the East, and apparently a native of Persia.

Of the order *Melastomaceæ*, *M. malabathricum* and *M. polyanthum* are both exceedingly common on waste ground and in open grass-covered spaces. The two species are very much alike, having broadly lanceolate leaves, much veined and covered with bristles, which on the under-side of the leaf are soft and have the appearance of down, giving a light-coloured effect. The leaves are opposite, and the stem is surmounted by a bunch of red-purple flowers, each one shaped

rather like a wild rose. The fruit, which has a black juice, is eaten, but is not of much account.

The most prominent plant in Siam of the order *Lythraceæ* is *Lagerstroemia*, of which several species and varieties grow in the jungles in all parts of the country. They are particularly numerous in Southern Siam, where some of the river banks are thickly fringed with them, and where, during the months of May, June, July and August, their profusion of beautiful mauve flowers is a striking feature of the landscape. Some of the varieties are large trees, others are shrubs. The Henna plant, *Lawsonia alba*, also belongs to this order, and is indigenous in Eastern and Southern Siam.

The order *Onagraceæ* is represented chiefly by *Jussieuia repens*, an annual water-plant which appears in great quantities floating upon the waters of Central Siam as soon as the rains come. It has small and uninteresting flowers. It is probable that many other plants of this order inhabit Siam, but they have not been identified.

Rhizophoraceæ. A number of species of this order, collectively known as Mangrove, inhabit the salt swamps and marshes round the northern shores of the Gulf of Siam. They are trees which root in the mud and form dense, unhealthy jungle right to the edge of the sea, and, extending for many miles on either side of the mouth of the river Menam Chao Phaya, afford a depressing first glimpse of Siam to the visitor approaching from the seaward. They are all much used for firewood, the greater part of the fuel consumed in Bangkok being cut in the Mangrove swamps and conveyed to the city in boats. Their bark is used for tanning locally-manufactured leather, but has not hitherto been exported. The seashores of Southern Siam also are fringed in places with Mangrove.

The order *Combretaceæ* includes the genus *Terminalia*, of which several species are good timber-trees in Siam. *T. Catappa*, the Almond tree, is very handsome, having

long horizontal branches with large smooth and glossy leaves, and is much used in Bangkok as a shade tree. The fruit is a very hard nut enclosed in a green outer shell, and with a kernel tasting something like walnut. The *Quisqualis indica*, a climbing shrub, is indigenous in Southern Siam, and is cultivated in gardens in all parts of the country for the sake of its axillary spikes of pretty pink flowers, remarkable for their long calyx-tubes.

The *Passifloraceæ* have several representatives in Siam, the most common of which is a delicate herbaceous plant, a tenacious climber, which grows in great profusion on waste ground in all parts of the country, having small white flowers of the usual Passionflower formation, and green fruits enclosed in the hirsute persistent calyx. This plant has lately acquired repute as a weed-killer and as a covering for the soil of rubber plantations in the Malay Peninsula and Southern Siam. The *Grenadilla*, a large and strong herbaceous climber, with handsome blue and yellow flowers, is a Passionflower indigenous in Southern, and also, probably, in Central and Eastern, Siam. It grows to an immense size, climbing up and covering the highest trees, and has a green fruit somewhat resembling a vegetable-marrow in shape and size, which is considered by some to be good eating. Other species of Passionflower are indigenous, and two or three foreign varieties are acclimatized in the country.

• The *Cucurbitaceæ* are numerous in all parts of Siam, both as plants cultivated for their fruit, and wild. They are all climbing or creeping plants, and the fruit is invariably in the form of gourds, differing considerably in size and other qualities. Some are very large, others diminutive, some are rough, others smooth; some long and thin, others short and thick; some are round, others polygonal; most are green, but some are red or yellow; some are sweet, others sour; and some are universally eaten, while others are

rank poison. Small Cucumbers, differing placentally from the European variety, Snake-gourds, Bottle-gourds, Pumpkins and Watermelons are the most common edible kinds. Several wild species which abound in old hill clearings and on open ground near the habitation of men, have brilliant coloured fruit; one small kind, which is eagerly devoured by birds, bearing gourds of bright crimson. A *Luffa* is apparently indigenous in Southern Siam.

The order *Begoniaceæ* is represented by species indigenous in the evergreen forests. A few have been brought under cultivation, but local amateurs prefer the ready-made, imported varieties, and the natives are therefore neglected. The indigenous species have not been classified, and new varieties doubtless await discovery.

Papayaceæ. The Papaya, which is one of the most common plants grown for fruit in the villages all over the country, is too well known to need description. It is a native of tropical South America and the West Indies. No plants of the order are indigenous in Siam.

Cactaceæ. Of this order a tall strong columnar plant, with many deep ribs (*Cereus hexagonus*), is very commonly seen round villages in many parts of Siam, where it is grown as a hedging plant, and partly, perhaps, for the beautiful white flowers which it usually produces in profusion. Though very widely dispersed it is not a native, but is of American origin, as are also *Opuntia spp.*, large plants with stems divided into flattened jointed sections, spikes few or absent, and flowers large yellow or small red.

The *Umbelliferaæ*, though a large order, appears to be scarcely represented in Siam. The Fennel is cultivated, and there are a few wild species which can be recognised by the inflorescence, but of which nothing is known and which possibly have not yet been named.

The order *Rubiaceæ* includes the *Ixora*, native of Southern Siam, and cultivated as a garden flower in

all parts of the country. One indigenous species has pale salmon-coloured inflorescence, another red, and a third white. The cultivated varieties are of every shade of yellow, pink and red. The Gambir of commerce (Siamese *Shi-ziet*) is a plant of this order, indigenous in Siam, where it is also cultivated, the yellow dye which goes by this name in commerce being an extract obtained by boiling the leaves of the plant. The Gardenia, a plant of this order, is much grown for its fragrant white flowers, but is not indigenous in Siam. Cinchona and Coffee both belong to the *Rubiaceæ*, but, though grown in the country, are not natives.

Of the order *Compositæ*, although many species, including Artichoke, Sunflower, Lettuce, Aster, Michaelmas Daisy, Chrysanthemum, Marigold, Gallardia, Cosmia, Coreopsis, and others, are cultivated in gardens, where many of them have become acclimatized, and whence not a few have escaped and become wild, yet but a small number of them appears to be indigenous in Siam. About a dozen small weeds have been enumerated, having blue, white and mauve flowers, and belonging to the Tubular sub-order, but no conspicuous-flowered plants have been met with, though doubtless many such will ultimately be brought forward.

Of the order *Plumbaginaceæ*, *P. capensis*, a foreigner with handsome flowers of pale blue, is cultivated, while *P. rosea* and *P. zeylanica* are indigenous in Siam. The native varieties are used in medicine and, being hardy plants and capable of considerable development, would repay cultivation by flower gardeners, who, however, neglect them.

The *Ebenaceæ* is an order represented in Siam by several trees, useful for their hard timber, and, in some cases, for the dye which they yield. *Diospyros Kaki* (Siamese, *Satorn*), which belongs to this order, is a fruit tree very commonly cultivated in Central and

Southern Siam, and apparently wild in the latter locality. It has large and handsome foliage, and the fruit, about the size of an apple, has twin almond-like stones in the middle, a velvet rind of a yellowish russet colour, and flesh of the consistency of a melon. The flavour is insipid to the European palate, and the Siamese themselves find the fruit more pleasing when prepared with sugar, coconut milk, etc. To the order *Styracæ* belongs the *Styrax Benzoin*, from which the resinous product known in commerce as "Gum Benjamin" is obtained. It is found in all parts of the country, but especially in the north, whence comes the finest quality of the resin known. The order does not appear to be otherwise represented.

The order *Sapotacæ* includes *Mimusops Kauki*, a large tree native of Southern Siam, having fine olive-green foliage and a small yellow fruit, very sweet, but enclosed in a rind containing acrid milky juice. *Achras Sapota* (Siamese, *Lamot Farang*) is much cultivated for its fruit, which is accounted one of the best in the Far East. The foliage is dark green, and in appearance the fruit resembles a potato. It is not native of Siam, but there are several indigenous species of the sub-order, the fruit of which, however, is not very interesting. *Dichopsis Gutta*, and other species of the same genus, indigenous in the forests of Southern Siam, yield certain grades of the product obtained from many trees of various orders in the Far East, and known in commerce as gutta percha.

The order *Oleacæ* is represented by *Olea fragrans*, a shrub with white jasmin-like flowers, small and sweet-scented, common in Central, Eastern and Southern Siam. A double-flowered variety (Siamese, *Mali*) with a heavy fragrance, is much cultivated, and is used for making garlands, scenting drinking-water and tea, etc. This variety is probably a native of China, but has long been acclimatized in Siam.

The *Apocynacæ* include the *Allamandas*, *Oleanders*,

Plumerias, Vincas, and the Beaumontia, all of which are extensively grown in Siamese gardens, though the first two do not appear to be indigenous in the country. *Plumeria acuminata*, frangipani, a peculiar, much-branching tree, which grows to a height of about fifteen feet, has thick, soft, fleshy limbs, full of milky sap, dark green lanceolate leaves gathered in tufts, and bunches of pinky-white, heavily scented flowers borne at the ends of the branches, is much grown in gardens and is easily propagated from cuttings. It is a favourite plant in the neighbourhood of Buddhist temples, and in Mohammedan graveyards. In the dry weather the leaves all fall off, though the tree continues to flower, and in this condition it has a mournful and unattractive appearance. Of *Vinca*, the Periwinkle, two species, one white and one magenta as to the flowers, are found on sandbanks and other open tracts of poor soil, sometimes covering acres of ground and making a brave show with their almost continuous succession of blossom. *Beaumontia grandiflora*, though said to be peculiar to the neighbourhood of Chittagong, has been found, apparently wild, on the islands of the Gulf of Siam, and on the mainland in Northern and Southern but not in Central, Siam. It is a strong climbing plant, growing to great size, and is much prized for its clusters of large creamy-white flowers.

The *Asclepiadaceæ* are a large order of which many species, including *Hoya* of many kinds, *Holostemma*, *Calotropis*, and others, are indigenous in Siam. *Pergularia odoratissima*, the "Tonquin bean," or "West Coast Creeper," is much cultivated for its fragrant, drooping clusters of small yellow-green flowers. *Cryptostegia grandiflora*, belonging to this order, a large spreading, scandent shrub with dark green glossy leaves and purple cup-shaped flowers produced in pairs, is also a fairly common garden plant. It has been cultivated in some parts of the world as a rubber producer, but without much commercial success. The

Stephanotis, a native of Madagascar, and a plant of this order, thrives in Southern Siam.

The order *Solanaceæ* has many representatives. The brinjal, egg-plant or aubergine (Siamese, *Makeua*) is cultivated in many varieties almost all over the country, while closely allied wild species inhabit waste ground and spring up as weeds on cultivated land, bearing fruit which is often large, and sometimes of very quaint shape, but nearly always inedible. One variety especially, a weed of Southern Siam, has a large golden fruit covered with regular nodules which give it a most surprising appearance. Another species, *Solanum macranthum*, a spreading shrubby tree, has clusters of large purple flowers which change into a dirty white after fertilisation. The flowers of all the species are very like those of the potato in shape. The potato, *S. tuberosum*, and tomato, *Lycopersicum esculentum* (sub-order), are said to be not indigenous in Siam, though a variety of the latter with fruit about the size of a pea, is commonly found in a practically wild state. The genus *Datura* is represented by *D. alba*, a common roadside weed with handsome tubular white flowers, and *D. fastuosa*, rather less common than the last, with immense white flowers tinged with purple, in form resembling three or four candle extinguishers projecting each a little out of the other. Englishmen in India call this plant the Hose-in-hose. The *Daturas* have handsome foliage and thorny fruits. They yield an extract which in small doses produces intoxication, and in large is a deadly poison. *Nicotiana*, the Tobacco plant, is extensively cultivated in all parts of the country, as are many varieties of Capsicum or Chilli. A small wild Chilli, excessively pungent, is apparently indigenous.

The order *Convolvulaceæ* is represented by an immense number of plants, all climbers or creepers, and many ornamented with very beautiful flowers. *Ipomoea Batatas*, the sweet potato, is cultivated in

every village. *Ipomoea macrorrhiza* is indigenous in all parts of the country, and is often to be seen covering large trees with the masses of its bright purplish-crimson flowers. *I. pes caprae*, the Goatsfoot Convolvulus, spreads itself over the sandy soil near the seashores of Southern Siam, in trailers of immense length, and bears handsome mauve-pink flowers at all seasons. *I. hederacea*, a delicate climber with large pale blue flowers is common on waste ground. *Argyrea nervosa*, a powerful, scandent shrub with large pale mauve-pink flowers, is cultivated on trellises in Bangkok. *Quamoclit vulgaris* is apparently indigenous and is also common in gardens where its very delicate foliage and small vivid red flowers are much admired. The Moon-flower, with large white fragrant flowers opening at night, is also used as a garden ornament. A host of other species with flowers, some large and handsome, others tiny and inconspicuous, abound everywhere except in the deep evergreen forests. They spring up in deserted clearings as if by magic, and wherever a fence is made or a stake driven into the ground a convolvulus of some kind will very shortly be found climbing upon it. Many varieties have never been identified and some of them are possibly as yet unknown to the botanical world.

The order *Boraginaceæ* contains the Indian Heliotrope, an unpretentious weed with small lilac-blue flowers arranged in a scorpioid inflorescence, one of the most common plants in Siam. It is in flower at all seasons and prefers rubbish heaps and spots where the soil is rich and dry.

Labiataæ. A large order containing the Mint, Sage, Marjoram, Basil and the Coleus, which can all be grown in Siam but are not indigenous. There are, however, many Siamese species, common as weeds in all parts.

The order *Verbenaceæ* is represented by a large number of plants of widely different general appearance. There are many species of the genus *Clerodendron*,

common in all parts of the country. *C. squamatum* is a jungle plant with stem rising some five feet above the ground and bearing a parasol-like expansion of rich green, heart-shaped leaves surmounted by a head of blossom like a mass of bright red coral. Another species which grows profusely in Northern Siam has a general resemblance to *C. Squamatum* but the inflorescence is white. *C. Thomsonii*, a pretty little climber with brilliant dark foliage and small white and red flowers, is much grown in Siamese gardens. *Congea*, a powerful scandent plant, indigenous in all parts of Siam, grows to the tops of high trees which it covers with its curious but effective dull-red bractiole blossoms. The plant is common in the lower districts of North Siam, where, in January and February, it is a striking feature of the jungle. But the chief Siamese representative of this order is the Teak tree which grows profusely in the deciduous forests of the north and furnishes one of the best and most durable timbers known.

The order *Scrophulariaceæ* is not largely represented in Siam, and such plants as there are have not been examined or classified.

There are several species of the small order *Utriculariaceæ*, indigenous in Siam where they live in the marshes of the Central Plain in great numbers. They are floating plants with small bladders attached to the submerged leaves, and their flowers, which are produced during the rainy season, are white, blue or yellow.

Many of the larger trees of Siam belong to the order *Bignoniaceæ*. These have usually large dull red flowers and pinnate foliage. Their wood is generally soft and white and of no particular value. Some climbing shrubs of the order have been introduced into the country for the sake of their handsome flowers.

To the order *Pedaliaceæ* belongs the *Sesamum* of commerce, two varieties of which are cultivated in

Siam. Other representatives of the order are not known to this writer.

The order *Acanthaceæ* is represented by herbs and shrubs, many of which have very beautiful flowers. *Thumbergia grandiflora*, indigenous in all parts of the country, is a strong climbing plant with fine heart-shaped foliage and wide-expanded pale blue flowers carried on long pendulous spikes. There is also a variety of *T. grandiflora* in which the flowers are white. *T. laurifolia* is also a native, with habits very similar to the last, but with lanceolate leaves and flowers of a darker blue. A climbing annual belonging to this order, with small yellow flowers having a sepia spot in the centre, is very common, more especially in old forest clearings and on lands near villages. There are several species remarkable for the arrangement of the flowers in wheat-ear-like heads.

The order *Loranthaceæ*, genus *Viscum*, the mistletoe, has two species common in Siam as parasites growing upon large trees of all kinds. The roots are firmly attached to the host beneath the bark, and a tree once infested by this pest in time loses its strength and dies. The seeds are covered with a viscid pulp which enables them to adhere to the twigs of trees with which they come in contact when falling from the parent.

Of the order *Piperaceæ* most of the species are indigenous in Southern Siam on both the east and west sides of the gulf. *Piper Betle* (Siamese *Phlu*) is cultivated extensively in all parts, the leaves being used for chewing with the Areca nut. The plant is a vine, grows best in the shade and requires a good deal of water. The leaves are deep glossy green and have a pleasantly-pungent aromatic taste. Of *P. longum*, a similar plant, the dried flower spikes are known as "long pepper." *Piper nigrum*, the pepper vine (Siamese *Prik Thai*), is cultivated in the Circles of Puket and Chantabun. At one time, that is about

two hundred years ago, almost all the pepper of commerce came from Siam.

The order *Euphorbiaceæ* includes the croton, the castor-oil plant and others well known in Siam. Many species are indigenous, notably *E. antiquorum*, a leafless cactus-like tree, common on barren uncultivated land in Northern and Eastern Siam. Some wild herbaceous species strongly resemble the English nettle in appearance. The tapioca, much cultivated in Southern Siam and reported indigenous there, belongs to this order.

The order *Casuarinaceæ* is represented by *C. muricata* which grows on the sandy seashores of Southern Siam on both sides of the Gulf. It is a tree which attains to great size and has a hard and durable wood which, however, has not hitherto been found of any particular value as timber. The young branches present the peculiar appearance of the branched *Equisetaceæ*. The leaves are mere scales, and a tree, at a distance, gives the impression of a fir tree, more especially when the sea breeze is heard sighing through its branches. Upon the new sandbanks which constantly form round about the mouths of the rivers of Southern Siam, the *Casuarina* is usually the first plant to make its appearance.

The order *Artocarpeaceæ* includes, of Siamese plants, the Jackfruit, the Breadfruit, and many Figs. The Jackfruit (Siamese *Kanon*) is to be found in the neighbourhood of most villages, and is easily distinguished by its smooth dark foliage and pale green fruit the size of a football, borne on the trunk or thicker branches. The Breadfruit (Siamese *Saké*) is less common, and is mostly confined to the south. Of Figs the most remarkable species are *Ficus religiosa*, *F. indica*, and *F. elastica*. The first is the sacred Boh tree of Buddhism and is common in Central, Northern, and Eastern Siam, where it is found round about villages and in the immediate neighbourhood of most temples and

pagodas, frequently, in fact, growing upon these last, the seeds having been dropped by birds into cracks in the masonry. *F. indica*, the Banyan, is common in the forests of the north, where it grows to an immense size. *F. elastica* has many varieties common in the jungles everywhere, but more especially in Southern Siam, which yield a rubber known to the trade as "Rambong," only a little less valuable than that of the best rubber-producing trees of the world. Of other Figs there are many wild indigenous species all of which can be identified by the characteristic structure of the fruit. In some the fruit is borne on the trunk or thicker branches, in others in the axils of the leaves, and in others again at the bottom of the trunk, sometimes almost underground. The fruit of many species is edible but is usually insipid.

The order *Lauraceæ* includes the Cinnamon and Camphor trees, the former growing to great size in the evergreen forests, and the latter apparently confined to the Southern districts. The bark of the forest Cinnamon tree is exported in large thick slabs.

The nutmeg of commerce, obtained from the tree *Myristica fragrans*, of the order *Myristicaceæ*, was at one time largely cultivated in Southern Siam, as in the Malay Peninsula and Archipelago. Of late, however, the price of nutmegs has fallen below the point where it pays to grow them in Siam, wherefore the gardens of this beautiful tree have been in great measure abandoned. The tree does not appear to have been found wild in Siam. The nut, beneath a golden yellow fleshy rind, is invested by a peculiar web-like red integument, the Mace of commerce.

The *Amarantaceæ* include the Cockscombs and Loves-bleeding, which do well in gardens in Siam, and also a large number of weeds found on all rough ground, one of which is used as a substitute, a very poor one, for spinach. *A. salicifolius* is grown in gardens for its striking red plume of drooping leaves.

The order *Nyctaginaceæ* does not appear to have any indigenous representatives in Siam, but the magnificent *Bougainvillea* climbing shrub, a South American plant, is acclimatized and is to be found in many gardens.

Angiosperms. Monocotyledonous Orders.

Of the order *Amaryllidaceæ* the genus *Amaryllis* is not very widely represented in Siam, though there are a few species to be found, more especially in the north, the flowers of which are very beautiful. The genus *Crinum*, on the other hand, has many species but less handsome flowers. The plants of the latter genus are partial to damp soil and they are more numerous in the southern than in other parts of the country. *C. asiaticum* is very common and frequently attains great size. Some of the rivers of Southern Siam are fringed with it for miles. Many smaller species have been noted including one with large pale pink flowers a good deal after the pattern of the *Amaryllis*.

The order *Dioscorideæ*, which includes the Yams, has many examples in Siam, all herbaceous climbing plants. Wild species are found in the jungles, and some of them have tubers which are considered by the country people to be good food. *Dioscorea alata* and *D. rubella* are much cultivated for their large white tubers.

The order *Bromeliaceæ* is represented by the Pine-apple only; imported to the East at some remote date from America, and long since naturalized in Siam as in all neighbouring countries, it is one of the commonest fruits of the bazaars.

The order *Hydrocharideæ* contains only aquatic herbs, species of which are common in the inland waters of Central Siam. *Hydrilla verticillata*, a curious plant of this order found floating in great quantity in some of the creeks and waterways of Central Siam, is used in the sugar refining industry.

The order *Scitamineæ* is one of the most widely

diffused in Siam. The plants are all herbs, very often of robust, arborescent nature. The sub-order *Zingiberaceæ* includes the Ginger, Cardomums, Curcumas, Alpineas, and others, species of which grow wild in great profusion, sometimes covering large areas as forest undergrowth, sometimes on cultivated land. Many of the plants have fine handsome flowers and all are aromatic. The sub-order *Marantaceæ* includes Canna, Arrowroot and Sital, all indigenous in the country. Of wild Canna there are apparently two species only, one having green leaves and small yellow flowers and the other copper-coloured leaves and red flowers. It is presumably from insignificant plants like these that the hundreds of beautiful varieties now to be seen in this part of the world have been evolved. The sub-order *Musaceæ* is represented by the Banana or Plantain and allied species. There can be little doubt that the Plantain is indigenous in Siam, for it is frequently encountered in a wild state, in the ever-green forests and in other localities whither it is difficult to believe that it can have escaped from cultivation. Many of the innumerable varieties which are cultivated may, however, have been introduced from abroad. The genus *Heliconia* is grown in gardens for its foliage. *Urania*, the Traveller's Palm, is also used as a garden ornament.

The order *Orchideæ* is represented in all its sub-orders, species of *Epidendrea* and *Vanda* being the most numerous. The deciduous forests of the North, and the "forêts clairières" of the East are the regions where the Orchids chiefly abound, great areas of jungle in these parts being aflame with the colour of their blossoms at certain seasons of the year. In Central and Southern Siam the order is not so well represented, but many varieties of *Vanda* thrive in the former locality, while both *Vanda* and species of *Dendrobium*, of the genus *Epidendrea*, are common in the latter, especially *D. angulatum*, the Pigeon Orchid, which

flowers every two or three months. About 1916 the cultivation of orchids became a fashionable pursuit amongst the Siamese. Thousands of plants were imported from abroad and the jungles of the country were ransacked far and near for native specimens with the result that many beautiful and hitherto practically unknown plants were introduced to the knowledge of local amateurs. Though the Orchids of Siam are apparently very similar to those of Burma, which have been so well described by Bartle-Grant and others, yet a careful study of them would be a labour of the greatest interest and value, and would probably bring many new varieties to light.

The order *Liliaceæ*, considering the great number of sub-orders and species which belong to it, is not well represented. Perhaps the commonest wild species is *Gloriosa superba*, which is to be seen towards the end of the dry season and at the beginning of the rains, a delicate climbing plant, frequenting the hedges and scrub jungle of all parts of the country, the very beautiful red and yellow perianth of its blossom making a dash of bright colour against the surrounding foliage. The Indian Aloe and the Onion family, belonging to this order, are grown in all parts of the country, but it is not clear that any of the species are indigenous. On the slopes of the higher mountains of the North a tall and graceful lily, with several large yellow flowers at the top of a leafy stem, is common during the early part of the dry weather.

The *Pontederiaceæ* are aquatic plants of which one species with small blue flowers borne on a long stem and at the foot of a large, leafy bract, is very abundant in the marshes and inland waters of Central Siam.

The *Commelinaceæ* include *Cyanotis*, a prostrate plant with purple leaves and stem, and *Tradescantia*, or Spider-wort, varieties of both of which appear to be indigenous amongst the damp undergrowth of the evergreen forests.

The order *Palmae* is a very large one and is well represented in Siam, more especially in the South. The Coconut Palm of many varieties thrives exceedingly in all the maritime districts of Southern Siam and in the Chieng Mai district in the North, but does not do so well in other parts. The *Palmyra* or Sugar Palm, on the other hand, flourishes in Central and Eastern Siam, where both sugar and the intoxicant known as Tari, or *Nam Tan*, is extracted from it, but is not very often seen in the South. The delicate and graceful Areca Palm is common in most parts, and many species closely allied to this last grow wild in profusion in Southern Siam and are much sought after by amateurs for the beauty of their foliage. Another wild kind furnishes the club-rooted stems which are sold under the name of "Penang Lawyer." The *Phoenix roebelinii*, a pinnate-leaved Palm, discovered by a German botanist in Northern Siam a few years ago, was considered a very rare palm, and specimens sold for high prices until some years later another traveller arrived with several boatloads of the plants and with the information that only a few miles from the Capital there are some square miles of jungle densely covered with them. *Phoenix tremulans* is also peculiar to Siam. The *Lao Chu Ohn* (Malay "Nibong"), whose tall thin stems grow in clumps, each one surmounted by a large tuft of very gracefully drooping pinnate leaves, is a handsome Palm, a native of Southern Siam where it is extensively used in house construction. The genus *Calamus*, or Ratan has species among the commonest of jungle plants in all parts of the country, but more especially in Southern Siam where there are upwards of twenty varieties. Some of these grow to immense length and thickness and all are of commercial value, though one or two species command much higher prices than the others. Their handsome pinnate leaves being armed with sharp thorns and their habits being scandent, the Ratans

interlace themselves with other trees and thus help to form the impenetrable thickets which are characteristic of many Siamese forest districts. The fruits of some species are eaten but are neither wholesome nor very palatable. The Sago Palm grows wild in great profusion in the inland creeks of Southern Siam and sago is produced from it, but is seldom exported and is not used locally unless there be a shortage of other food.

The *Pandanaceæ* include the Screwpines and the Nipa, both indigenous in Siam. Of the former, several species are used for weaving very beautiful boxes, mats, baskets, etc., which are made from strips of the long strap-like leaves. Some grow far inland, but the commonest kinds are found on the seashore, one, which flourishes on the beaches of Southern Siam, being remarkable for its large, golden, pineapple-like, but inedible fruits, which hang beneath the spreading branches of the tree. Another species is sometimes used for hedging in the rice fields. The leaves of the plants of this order are spirally developed on the stem, whence the name Screwpine, and when young they have a pleasant, penetrating odour. The Nipa grows wild in a fringe along all the brackish creeks and rivers of the littoral districts of the country. It presents the pinnate leaves of a Palm and the inflorescence of a Pandanus, all growing direct from the root in a compact mass. Though it has no visible stem its foliage is very handsome and is a considerable factor in the scenery of the maritime districts. The fruit is eaten and is also used for the manufacture of a strong intoxicating drink. The leaves are largely used for thatching.

The order *Aroideæ* includes the *Arum*, *Caladium* and other similar genera. A large number of species of *Arum* grow wild, frequenting dark shady spots. In fields and gardens they are among the first weeds to appear and the most difficult to eradicate. They are of all sizes and many of them have large and beautiful foliage, though the characteristic inflorescence consisting

of minute flowers borne on a spadix and sheathed in a spathe is usually uninteresting. The stems and corms of more than one species are used as food. Varieties of *Caladium*, some indigenous and some foreign, are cultivated for their foliage.

The sub-order *Pistaceæ* comprises aquatic plants floating free on the surface of the water. *Pistia Stratiotes*, sometimes called the water lettuce, a circular plant with bright green leaves rising about three inches above the surface of the water and having a mass of filamentous roots depending below, is very abundant on the waters of Central Siam. The appearance of this plant, often in large and compact masses, floating on the current of the main rivers, is a sure sign of rising waters in the interior for, with the first swelling of the meres and marshes where it grows, thousands of plants are floated out and find their way into the rivers, a process which continues so long as the water is rising and reaching further out over the land.

Minute plants of the order *Lemnaceæ*, some with roots and some practically without, form the green scum to be seen on stagnant pools at certain seasons.

Another floating plant which appears in great quantity on the rising waters of the rivers is *Eichhornia speciosa*, the Water Hyacinth (Siam *Pak Jawa*), sometimes classed with the *Pontederias*, which grows in great abundance on all inland waters, and, when in flower, covers the entire surface of marshy pools with its beautiful mauve flower-spikes. The inflorescence is very fugitive, lasting a few hours only, and when faded the flower stem immediately turns down under water, apparently in order that the seed may not become dry and so die. Curiously enough, however, the plant does not usually propagate itself from seed but by offsets. Owing to some combination of favourable circumstances, the nature of which has apparently not yet been discovered, this plant has recently

multiplied itself enormously and has spread to such an extent in Kambodia, the Philippines and Burma, as well as in Siam, as to interfere with the cultivation of rice fields and endanger the maintenance of waterways. In all these countries the Government has found it necessary to enforce measures for the reduction of the pest, but these have not hitherto been of much avail.

The tall and graceful arrow-head leaves of *Sagittaria Sagittifolia*, a plant of the order *Alismaceæ*, are to be seen in the marshy lands of most parts of the country, and other species of the various genera of this order, which includes the Rushes, are common.

The order *Cyperaceæ*, including the Sedges, is numerously represented. The *Carex*, replaces grass on wet ground, and a tall Sedge, called in Siamese "Yah Sông Kratiem," infests the rice fields of Lower Central Siam to an extent which sometimes seriously interferes with agriculture; the plant, unless its roots are most carefully removed from the soil before seed-sowing, springing up with great rapidity and choking the young rice.

The order *Gramineæ*, the plants of which are distinguished from the Sedges by their hollow, jointed stems, is a large one and includes a great number of Siamese plants, ranging from the giant Bamboo to the most diminutive grass. Of the domesticated genera, besides rice which is grown in vast quantities in every district, maize, millets of several kinds, and sugar-cane are largely cultivated. Wheat, Barley, Oats and Rye are cereals unknown to Siam, though the first would probably thrive if cultivated in the north. The Bamboo, of which there are many varieties, is put to an extraordinary number of uses, supplying the material for house-building and almost all domestic utensils of the peasantry. The young shoots are also used for food.

Gymnosperms. Of the three orders contained in

this group, *Gnetaceæ*, *Coniferæ* and *Cycadaceæ*, the first is unrepresented in Siam and the other two have apparently only one species each. On the higher lands near the northern frontier and in parts of Eastern Siam a fir-tree, *Pinus merkusii*, is found, and in Northern, Eastern and Southern Siam one kind of Cycad, *Cycas siamensis* (*Maiprataw*), a curious, short, fern-like tree with a thick stem, is common in the deep jungles.

Cryptogams. *The Vascular Cryptogams.* Ferns are few in Central and Eastern Siam and in the North are largely confined to the evergreen forests. In Southern Siam, however, they are numerous as individuals, though even here the species are not many. The most noticeable is a coarse-branched *Polypodium* about three feet in height, which covers the ground in many localities after the manner of bracken and is found in large patches sometimes of many acres in extent. Other *Polypodia* (Hartstongue), a few species of *Adiantum* (Maidenhair) and many large-growing and curiously-shaped arboreal ferns, are common. A species of *Lygodium*, a graceful climbing fern, is very common in the south, as is also a handsome climbing *Selaginella*, a moss-like plant with a curious metallic sheen on its green leaves in certain lights, probably *S. bicolor*, which grows rampant in the shady glades and orchards.

Muscineæ. Beyond the fact that many species exist, very little is known yet of the mosses of Siam. They occur in all parts of the country but more especially in the evergreen forests and in Southern Siam, where the absence of a dry season is favourable to their existence. It is probable that all the species found in tropical India are represented. Most of the large forest trees are infested with them, those on the tops of the northern mountains and in other particularly damp localities being frequently draped with the long weepers of the coarser kinds.

Thallophytes. This group comprises the *Algæ* and *Fungi* of which, though they abound in all parts of Siam, no more seems to be known than of the Mosses. Of Mushrooms, edible and otherwise, the bracket-shaped Polypori, the Puff-balls, Earth-stars and other species are evident to the casual observer, and the same may be said of many of the lesser kinds of *Fungi* which attack decaying animal and vegetable matter and, during the rainy season, find a lodgment on boots, books and in other similar places where their presence adds to the trials attending human existence. As regards the lowest orders of the vegetable kingdom, the Bacilli, Bacteria, etc., Bacteriological Laboratories at Bangkok are making explorations and investigations amongst these which may be expected to give valuable information as to the identity, nature and habits of the forms present in Siam.

FAUNA.

The study of the Fauna of Siam until lately was almost entirely neglected, and no book dealing extensively with the subject has ever been written. In 1912, however, a Natural History Society was formed in Bangkok by a few enthusiasts and this soon became very popular and aroused general interest in the subject. Members were encouraged to investigate various branches of the science and to discuss and display their discoveries at periodical meetings. Later a Journal was instituted, in which many able and erudite articles have appeared. Doubtless from amongst the supporters of the Society there will some day emerge a giant who shall accomplish an exhaustive work on the whole Fauna. Meanwhile, however, the works of Mason and Oates on Burma, and of Wallace on the Malay Archipelago, have no counterpart in Siam, though, had the ill-fated French naturalist Mouhot lived to complete his explorations

and to compile a full record of all his observations, such might not have been the case. As it is, the fragmentary notes of Mouhot, Haase, Fischer and other quondam travellers, together with the lucubrations of the Natural History Society, constitute the only literature on the subject which, from the geographical position of the country, is undoubtedly one of great scientific interest and importance.

In view of this paucity of available information, it is impossible here to attempt more than a brief enumeration of the most noticeable species of the various orders, based upon the above-mentioned fragments and upon the intermittent investigations of an untrained observer.

Mammals. The order *Quadrumania* is represented by one genus of ape, several of monkeys and one of lemur. The white-handed Gibbon (*Hylobates Lar*) is an anthropoid ape, about three feet high, tailless, with very long arms and legs, the adult males black or ochre-brown and the females and young white or grey, and is common in the remoter jungles. The black Gibbon (*H. Hoolok*), closely resembling the white-handed Gibbon in all but colour, is also found in most parts of Siam but is less common than the latter. Of the Macaques there are at least five species, the most common being the Crab-eating Monkey, found everywhere near the seashore, the little brown-grey, long-tailed monkey and the red-brown short-tailed monkey. All these three have cheek pouches.

Of the "Langurs" (*Semnopithecus*), two species are known and probably many more exist. The "Lutong" is fairly common and grows to great size and strength. The "Langurs" have no cheek pouches. The single species of Lemur, a small, tailless, nocturnal animal with sharp nose, very large eyes, soft fur and a long sharp-pointed nail on the index finger of one hand, is common.

Gibbons, Macaques, Langurs and Lemurs are all

frequently kept in captivity. The first are remarkable for their absurd exhibitions of affection towards human beings, the second and third are trained in the South to pick coconuts, and the Lemur is popularly supposed to be gifted with second-sight and, as its Siamese name *Ling Lom* (Wind Monkey) indicates, to have in particular a mysterious sympathy with the wind, for which reason a specimen is frequently carried on board native sailing craft.

The order *Carnivora* is represented by many species of Cat, two or three of Bear, three of Dog and one of Otter. The cats include the Tiger, Leopard, a tree-leopard, and several smaller species, a Tiger-Cat, a Wild-Cat, a small but very beautiful Leopard-Cat, a Fishing-Cat and probably some others. The Domestic Cats of Siam are of three species. One is very small, brindled and having a peculiar twist in the tail in the form of the letter Z. The other two are larger and have a long straight tail. One of these last is of a light fawn colour shading into deep sepia at the feet, nose, tips of ears and tail, and has blue eyes. The other has very short fur of a uniform mauve colour, and yellow eyes. The first species is common throughout Further India but the other two are peculiar to Siam and are much sought after by European cat amateurs. The Tree-Cat, the Palm-Cat, the Lesser Civet (*Viverra Zibetha*), a black and grey striped animal, and a small red-brown relative of the last, are all frequently met with. *Paradoxurus hermaphroditus* (Siamese Eo Hen; Malay *Musang*), a black-spotted, ring-tailed member of the civet family, is very common in Southern Siam, where it is often kept tame. In the wild state it steals fruit and destroys poultry. The Bears are the small Malay Bear and the Sloth, or Indian, Bear. The Himalayan Black Bear probably also occurs in the mountains of Northern Siam. The Domestic Dog is the widely-distributed pariah. The other species of Dog are the

Jackal and Wild Dog, both very rare. The species of Otter is that common throughout the Oriental Region.

The order *Insectivora* consists of several genera and species. All are small animals and most are of nocturnal habits. Three species of Mole have been recorded and an equal number of Shrews, one of the latter being very common and emitting a strong odour of musk. The so-called Flying Lemur, or *Colugo*, a soft-furred arboreal animal about three feet long when adult, is fairly common in Siam. The animal, which does not properly fly and is not a Lemur, has been placed by some authorities in this order but by others classed apart in a family named the *Galeopithecidae*, of which, except for a very slightly different variety found in the Philippines, it is the sole representative. It has been found in nearly all parts of Further India and in the Malay Archipelago as well as in Siam. Its chief peculiarity consists in a lateral extension of the skin on both sides of the body into a loose, furry membrane attached to its limbs, neck and tail; which membrane, when the limbs are extended, forms an aeroplane on which the animal glides through the air. The dentition of this animal is also peculiar.

Cheiroptera. The number of bats in Siam is immense, both the fruit-eaters (*Mega Chiroptera*) and the insect eaters (*Micro Chiroptera*) being represented by a large number of genera and almost innumerable species. The most conspicuous is the Flying Fox (*Pteropus edulis*), the largest bat in the Old World of which great numbers live near the haunts of man, convenient to the orchards of the latter, on the fruits of which they live. They form colonies on certain favoured trees in the jungle, where they hang head downwards in hundreds and sometimes in thousands, asleep during the day, and whence they sally forth after sunset and fly slowly through the twilight to their feeding grounds. Sir John Bowring remarks that the enormous numbers of Flying Foxes round Bangkok obscured the evening

sky when they passed over the city, and brought on a darkness as of night. Certainly there are many thousands of the animals around the Capital, as their depredations in the fruit gardens show; but, whatever may have been the case in Sir John's time, they do not cause any perceptible obscurity of the heavens now. The Flying Fox has a dog-like muzzle, deep brown or black fur with a red ruffle round the neck, and black wings which when full spread often measure four feet from tip to tip. Its classical name notwithstanding, the animal is not usually eaten in Siam. Other fruit-eating bats of Siam are the genus *Cynopterus* of which some ten or more species are common, *C. marginatus*, about the size of a thrush, being especially so. The genus *Carparycterinea* is also represented by several species, *C. Minimus*, the smallest fruit-eater known, being common.

Of the Insect-eating Bats (*Microchiroptera*), many genera are present; leaf-nosed, horse-shoe, long-tailed, short-tailed and tailless. These, together with many of the fruit-eating species, inhabit deserted temples and caves in thousands, where they alternately quarrel and sleep all day, coming out at night to feed. The tall palm trees which dot the rice fields are also a favourite resort, each tree having its family located just beneath the leaf tuft, in the shadow of the hanging dead-leaves. The floors of the caves with which the limestone hills all over the country are honeycombed are usually covered with a layer of bats' dung several feet thick which makes an excellent manure and also provides the saltpetre from which the country folk manufacture their gunpowder. In the deep river-gorges between Chieng Mai and Raheng the traveller may hear, at evening, above the ever-present sound of the rapids, a rushing as of innumerable birds and, on looking upward at the strip of sky which the precipitous rocks leave visible, will see swarms as of bees in the air high above him. These are bats from

the caves in the rock-face, passing up over the lip of the gorge from two to three thousand feet above and away to the uplands for food. Here truly the sky is partially obscured at moments, as swarms consisting of what appears to be hundreds of thousands of individuals, pass upward through the congested space.

There are many species of the order of *Rodents* in Siam. A small grayish-brown squirrel is very common in all gardens, and six other species have been observed, most of which remain unclassified. A black squirrel with white belly is fairly common in remote hilly jungles. It measures nearly four feet in length, to which dimensions the tail contributes considerably more than half. A pure white squirrel is also known, and a pale yellow or almost white species is common on the islands and near the shores of the Gulf. A small species with mouse-coloured fur, small ears, thin tail and with yellowish-brown stripes extending from the snout over each eye to the base of the ears, is a common garden pest in and around Bangkok, where it may often be seen pursuing investigations of its own, even in the interior of dwelling-houses.

All squirrels in leaping from tree to tree spread their limbs to the fullest extent, thereby flattening themselves and obtaining some degree of support from the air. In the Flying Squirrels, of which the Taguan (*Pteromys petaurista*) and two or three other species are known in Siam, the surface thus presented is much increased by the extension of the skin between the fore and hind limbs, enabling the animal to make long flights or glidings through the air in the same manner as the Flying Lemur.

Rats and Mice abound in Siam. The Brown Rat is very common and attains a great size. The Burmese Rat is also found. A large species has recently been noted in Southern Siam which has not been identified and is probably new. The slow-moving Bamboo Rat is often met with and a long-tailed Tree Mouse has

been obtained at Chantabun. The rattle-tailed species of Porcupine is common, and this nocturnal animal does much damage to crops planted in jungle clearings. A second species of Porcupine with flattened bristles and long, scaly tail is also occasionally met with. Rabbits are not found in Siam, but one species of Hare is fairly common.

The order *Edentata* is represented in Siam by one, or possibly two, species of Pangolin or Scaly Ant-eater, a curious little animal with long narrow body, short limbs and a sharp nose, the whole upper surface of the body, including head and tail, protected by hard, overlapping, horny scales, and the underneath part thinly covered with hairs. It is a terrestrial, burrowing animal and it rolls itself into a ball and emits a disgusting odour when attacked. It is eaten by the country people and is considered a delicacy.

The order *Ungulata*, or Hoofed Animals, contains the Indian Elephant, sometimes placed in a separate order, *Proboscidea*, which is still fairly common in Siam. Warrington Smyth has remarked a variety of elephant found on the strip of land which separates the waters of the Gulf of Siam from those of the inland sea of Songkla. This is reddish in colour, does not exceed eight feet in height and has remarkably small head and feet. The variation has probably resulted from confinement during the lives of many generations to a small area under peculiar natural conditions. The odd-toed Ungulates include a small species of horse, two species of Rhinoceros, single-horned and double-horned, and, in Southern Siam, the interesting piebald Malayan Tapir, an animal not known in Asia outside the Indo-Chinese region. This last is a large, swamp-haunting beast with slightly elongated and prehensile snout, of peaceful disposition and nocturnal habits. The piebald markings do not vary in position, every adult individual having black head and shoulders and white rump. When quite young the animal is not

piebald but striped. The even-toed Ungulates are represented by one species of Pig, four species of Chevrotain, six species of Deer and seven of horned-cattle including sheep and goats. The Pig is the Indian Wild Pig, and is very widely distributed, the domestic pig of Siam being apparently descended from it with a crossing of the Chinese domesticated pig. The Chevrotains are commonly called Mouse-deer and are a distinct family allied both to the Pig and the Deer. The four known species differ very little from each other. The largest is less than eighteen inches high and the smallest is considerably less than a foot. None of them have antlers or horns, but the males are armed with small tusks. The true Deer comprise the following: the Muntjac or Barking Deer, two species, a red animal with a white belly, short antlers set on high bony excrescences, and having deeply indented lines down the sides of the face, the males bearing short tusks; the Hog-deer, *Cervus rucervus*, the Eld's or Brow-antlered Deer, with a tine of each antler protruding downwards and outwards before the brow; the Schomburgk Deer, a handsome animal with much branched antlers found only in Siam; and finally, *Cervus Unicolor* (Siamese Kwang; Malay *Rusa*; Hindi *Sambhur*), very common and the largest species in the country. Of the genus *Bos*, the Indian Bison or Gaur is found in the remoter mountains; the Banting or Wild Ox is fairly common in the south, and the Wild Buffalo, closely allied to the domestic species, is said to exist in the wildest parts of lower Northern Siam. The domestic cow is of the small, humped Indian variety. The Goat-Antelope has frequently been secured and is the same as that found in the Malay States, in Burma, and in the Himalayas. A domestic sheep is bred in the Southern Provinces only, and domestic goats of mixed breed are fairly numerous.

The order *Cetacea* is represented by two species of

Dolphin which occur in the Gulf of Siam, and the order *Sirenia* by the amphibious Dugong, which has been found on the coasts of Southern Siam and of Chantabun. There is evidence that the existence of this, one of the strangest of mammals, was known to Western naturalists many centuries ago ; their information, gleaned from the tales of imaginative travellers, leading them to endow the animal with semi-human qualities and to suppose it to be a sort of Merman. The characteristics which were apparently responsible for their opinion were the short nose, small, rounded head and square-shaped shoulders which, when the beast is seen from a distance, half submerged in water, give it a somewhat human aspect ; also the pectoral position of the mammæ and the great affection evinced for the young, of which only one is produced at a birth. Possibly also the theory of the Siamese that the lost souls of dead and damned fishermen find a habitation in the bodies of Dugongs, may have had something to do with the idea. The animals are, however, of the most unintelligent and cow-like disposition, browsing peacefully upon marine vegetable growth in the shallows of estuaries, or lying ruminating on the shore near by, quite untroubled by anything in the shape of semi-human aspirations. The males are armed with short tusks, suppressed in the females. The length of a full-grown Dugong is from eight to ten feet ; the skin is thick, black and comparatively hairless, the body contains a considerable amount of blubber, and the meat is much like beef.

Birds. Siam possesses a large number of species of birds representing many families. The attention of the Natural History Society of Siam has been devoted more assiduously to the study of Birds than to any other branch of the Science. Several fine collections of specimens have been made by members ; highly interesting monographs have appeared in the Journal of the Society ; several hitherto unknown species and

varieties have been discovered and classified, and many unsuspected facts in the history, life and habits of various birds have been revealed to the naturalist world. Doubtless an exhaustive work on this subject will presently result from the labours of the Society. Meanwhile, no more has been attempted here than a bare enumeration of some of the better known species of the various orders and families.

Order Passeres. The House Crow is extremely common in all towns and villages except in Southern Siam, where, for some reason, it is comparatively rare. The Jungle Crow, a larger bird, is also fairly common. Magpies occur in the North. The Laughing Thrush, a beautiful white and brown bird popularly known as "the Lying Chinaman," is found in flocks in the deep jungle, where its loud note as of garrulous talking often surprises the traveller. Three species of Bulbul are fairly common. Certain long-tailed brown birds, common in India, where they are called the "Sat Bhai" (seven brothers) because they are (erroneously) supposed to go about in flocks of seven, haunt the outskirts of villages. Amadavats swarm in the rice-fields where they are trapped by hundreds, and the common Sparrow is ubiquitous, but there are few other Finches. The jet black King-Crow and his cousin the Racket-tailed Drongo are often seen, the Bird-of-Paradise Fly-catcher, with its beautiful drooping, white tail-plumage, more rarely. A small, pied ~~Fruit-eater~~ (*Rhipidura*) is very common and is constantly to be seen catching flies on the wing, at the same time performing complicated aerial gyrations, thereby apparently combining pleasure with business. A green and russet fly-catcher, with two long tail feathers, is very common by the rivers, breeding in holes excavated in the banks. The Tailor-bird and other warblers are many, although, like most members of this family, they do not warble conspicuously. Of the Starling family Golden Orioles are sometimes seen, and Mynas,

of which there are at least four species, are very common. The handsome, black, wattled Mynah (*Gracula*) becomes very tame in captivity and is easily taught to speak. The Pied Mynah, the House Mynah, and one peculiar to Siam are seen everywhere. The peculiar bottle-shaped nests of the Rice-bird, sometimes called the Weaver-bird, are often seen, usually many together, hanging from the drooping ends of the branches of trees. Of Swallows and Martins there are many species, the most remarkable being two or three allied species of little Rock Martin or Swift, the nests of which, constructed entirely of a gelatinous substance secreted in the crop of the bird and built among precipitous rocks on the coast, are taken and exported to China as the delicacy known as Edible Bird's-nest, incidentally producing a considerable Government revenue. Two species of small grey Shrikes are common. The Cuckoo-Shrike is often seen and the little Swallow Shrike has been observed. The Malayan Pied Robin is frequent and quarrelsome and noisy.

Order *Picariæ*. There are many species of Kingfisher in Siam, the Pied Kingfisher being perhaps the most common, though a large species with orange beak and blue and red body, which apparently feeds on land insects and is often seen far away from water, is also very abundant. The Woodpeckers are a large family, often of gorgeous plumage and always of noisy disposition. Two species of Night-jars are very common and can be seen at nightfall, flitting through open glades or sitting, parallel with the branch, on the stouter limbs of trees. To these last are allied the Swifts, of which there is one species known. The voice of the "Ice-bird," the commoner Night-jar, is heard in the land during hot weather evenings, choirs of them, sometimes a dozen or more, sounding together and maintaining an anvil chorus far into the night. The Indian Co-il is common and reiterates "Who are you?" with rising cadence with as much persistence in Siam

as in other Eastern Lands, while the Crow Pheasant or Coucal, a rather distant relative of the last, an untidy, rusty red and black bird with a long tail, walks under the bushes near villages continually crying "Poot, Poot." The Cb-il, which Siamese call *Nok Ka Wow*, or "The bird that says, Ka Wow," is commonly kept in captivity. A Barbet is often to be heard hooting through the heat of the day, and sometimes, though rarely, his red face and fat, blobby beak may be seen protruding from a hole in a dead tree. His small, brilliant green and black body is usually concealed from view. A larger, long-tailed Barbet frequents the shady thickets round villages. At least two species of Cuckoo have been identified and one is very common in places. The Roller, or Blue Jay, is to be seen everywhere. Of Hornbills there are three species haunting the deeper forests, and both the brown and spotted Hoopoe are sometimes seen in the more open parts of the country.

Order Columbæ. Of Doves and Pigeons many species have been noted, including Blue Rocks which breed under the eaves of temples, Ring Doves, Ruddy Ring Doves, Ground Doves, Spotted Doves, the large Grey-headed Imperial Pigeon and numerous Green Pigeons, and there are probably many more not yet identified. Ring-doves are kept in cages in almost every house, good specimens being much sought after and commanding high prices. Some species of ~~Green~~ Pigeon, particularly that with two long red tail-feathers, resemble parrots in many ways.

In birds of the order *Psittaci*, Siam is not rich. Two or three varieties of Parrakeet, notably the Rose-ringed Parrakeet, are common in the north-east and central districts but the only parrot seen in Southern Siam is a small green Lorikeet with a red back, and a body but little larger than that of a sparrow.

The Birds of Prey, *Accipitres*, include two species of Vulture, the common Kite, the Brahmany Kite, the

Pied Harrier, the Jungle Kite, the White-headed Osprey, the Sparrow Hawk, the Peregrine Falcon and many lesser Hawks. The Ospreys and another kind of eagle frequent the mouths of all rivers of Southern Siam where they pick up a fat living from the jetsam of fishing boats passing in daily. There are six species of Owls, varying much in size and colour but all of similar habits. The smallest owl is no larger than a thrush.

The hideous, bald-headed and high-smelling Adjutant Bird which feeds on carrion, the more respectable-looking black and white stork, and the Pelican Ibis, are found in the plains, and the magnificent Sarus Crane, Siam's only Crane, six feet high, with mauve plumage and red head, is often seen in the valleys of the north. The Thawmat Ibis has been shot on the Korat plateau but is very rare.

The Herons are well represented. White Herons of many species, collectively known as Padi-birds, nest in great numbers in the trees near the rice fields. The Egret which, at breeding time, produces the beautiful white feathers known as aigrette, is one of these. The Solitary Grey Heron is found in the marshes and several kinds of Bittern are known. The Waders, Sandpipers, Curlews, Coots (including the Jacana), Plovers and Snipe are also numerous. The common Snipe, Pintail Snipe and Jack Snipe are abundant from August to January or later, in Central Siam. The Painted Snipe is also present and Woodcock are occasionally shot. The Carbuncled Plover with spur wings, haunts the fields along the edge of the jungle, only desisting from his favourite occupation of duelling to hover over the head of the chance snipe-shooter, exclaiming loudly "Did-ye-do-it," until all the shooting in the neighbourhood is quite spoilt. A Golden Plover is found near unfrequented ponds and Sandpipers swarm on the brink of every pool. Gulls and Terns abound on the coast.

The Gallinaceous birds include the Jungle Fowl, from which it is presumed the different varieties of domestic fowl were originally derived ; the Pea Fowl, the Argus, Silver, Fireback and many other pheasants ; the lesser Chinese Francolin or Tree Partridge, and several kinds of Quails.

Of web-footed birds the Pelican frequents the plains, more especially at flood time, and is often captured and domesticated. Cormorants of two or more species abound on all the rivers. Frigate birds, Gannets and Petrels are seen in the gulf, and various kinds of Duck, the Brahmany Duck, the Mallard, the Whistling Teal, the Cotton Teal, and others occur, though not in the vast numbers common in the North of Further India.

Reptiles. The Reptiles of Siam do not differ much from those of India and Burma. The Chelonian, Crocodilian, Lacertilian, and Ophidian groups are all represented, but many species known to exist have not yet been scientifically examined or classified, though enthusiasts of the Natural History Society are now doing much good work in this section.

Among the *Chelonians* are the Snapping Tortoise, an aquatic animal with a long neck and a soft shell, the name of which is derived from its habit of snapping fiercely at anything which comes near it ; the Hawksbill Turtle, valuable on account of its shell and for its eggs and remarkable for the length of its flappers. These are often seen in the Gulf. The Loggerhead is common in the southern rivers ; several species of amphibious Tortoise occur, including one with a long tail and large head, all hard-shelled and armed with claws ; and one species of Land Tortoise is fairly common.

Of Crocodilians two species are known, *Crocodilus Porosus* the great crocodile of India and *C. Siamensis*, a near relation of the Indian Marsh Crocodile or "Muggar." The former is found in most of the rivers but is gradually being exterminated. This species

prefers the brackish water near the mouths of the rivers, sometimes attains to over twenty feet in length, and very rarely does harm either to man or beast. *C. Siamensis* inhabits the inland marshes of Central and the lower part of Northern Siam and is, in parts, very common. At Sawankalok, far inland, crocodiles are kept in a tank in one of the temple grounds, and are said to be hundreds of years old. The Gavial probably exists in Siam but has not been noted.

The *Lacertilian* group is well represented. Amongst the most common examples are the Geckos of which four species frequent the interior of houses. The largest of these, *G. verticillatus* often exceeds twelve inches in length, is spotted rather like a trout and crows loudly with a hoarse voice, whence its local name, *Tok-Kè*. The other Geckos, collectively called *Ching Chok* in Siamese, do not exceed six inches in length. All these have the toes flattened into suckers which enable them to cling to the smooth surface of rocks, walls and ceilings. The Caudal vertebræ are so constructed that the tail comes off on small provocation and, in fact, can be dropped at will. It soon grows again. The Tree Lizards are of many species, the males of one of which (*Catotes ophiomachus*) has a crest that swells and turns red under stress of emotion. It is known in Siamese as *King Ka*. The males of another species have the power of changing their colour from inconspicuous brown to vivid yellow and blue. There are no true Chameleons in Siam. The Flying Lizards (Genus *Draco*), of which several species occur in Southern Siam, belong to this group. These last frequent forests and coconut plantations and, by means of wings or rather aeroplanes formed of skin attached to greatly elongated ribs and spread out or folded close at will, glide with great velocity from stem to stem among the trees. The grey colour of the common species renders them inconspicuous when at rest, but they are able to reveal their presence by

the sudden inflation of a white bladder under the throat. A beautiful species of vivid green colour is sometimes met with. A pretty smooth-skinned, shining Grass Lizard, *Mabouia Siamensis*, in Siamese *Ching Lane*, dark brown above and yellow underneath, with a black line along each side from the eye to the root of the tail, is common. A Slow-worm without legs occurs, as also does another whose legs are almost rudimentary and apparently useless. The latter is rare. Monitor Lizards (*Varanus*) are common. The largest (*Varanus salvator*, in Siamese *Heeah*) are usually found in swampy jungle and attain a length of seven or eight feet. Several smaller species are arboreal. They are not usually eaten in Siam but a part of the liver is used for medicinal purposes.

A species of Skink abounds on dry sandy ground, in which the animals burrow. They never wander far from home, and when surprised, dive into their holes with extraordinary velocity and precision. They are eaten by the country people.

Of Ophidians upwards of sixty species are known and probably many more await classification. The Python is common but, though said to attain thirty feet in length, is rarely found over twelve feet. The Colubrine Snakes are very numerous and include the common Rat snake and many species closely allied, the Green Whip Snake, the Ornate Tree Snake, and, of poisonous snakes, the Hamadryad, the Cobra, the ~~Banded~~ Adder, the Russell's Viper, the Green Viper, the Krait, and others. Two little Earth Snakes are known, both perfectly harmless. One of these has markings at the end of its stumpy tail which give that part a resemblance to a head. This end it exposes when attacked, meanwhile concealing the true head beneath its coils. Naturally it is commonly reported to have two heads and therefore to be doubly dangerous and poisonous. Many of the non-poisonous land snakes are more or less aquatic in their habits, as for instance

the Horned Snake (*Herpeton tentaculatum*) which has a pair of horns or tentacles growing on the end of its snout. Most of the poisonous Siamese snakes are marine. The people, however, imagine all snakes, land and water alike, to be deadly, though in reality the bite of only one species in seven of those which occur in Siam is in any way harmful.

Batrachians. This order is represented in Siam by the Frogs, which are very numerous both in species and individuals, and by a few Toads. The commonest Frogs are the Edible Frog (*Rana tigrina*), the Bull Frog (*Callula pulchra*, a queer name for an animal as unlovely as any in the world), the little Green Frog and the Tree and "Flying" Frogs, the last two with large eyes, long, delicate hands and feet (partly webbed) and sucker toes, also with marvellous jumping powers but small judgment of direction or distance. Common Toads are very abundant, and Horned Toads are known.

Fishes. The fishes of Siam, both marine and fresh-water, are exceedingly numerous, and constitute, after rice, the chief article of food of the people. For the supply of Bangkok, many thousands of individuals belonging to species which may be counted by the hundred are daily brought up from the sea, while an enormous number, but of much fewer species, are supplied from inland waters. A considerable proportion of the population lives by fishing, and fish, dried, ~~canned~~ or pickled, is exported in large quantities.

Carnivorous Sharks are common in the gulf, and are of seven species, some attaining great size, others, as the small Dog Fishes, averaging about eighteen inches in length. The Hammer-headed Shark is frequently caught off the shores of Southern Siam. Zebra Sharks and Thresher Sharks are less common. The Saw Fish with snout elongated in a long flat process of bone covered with skin and fringed with spikes or teeth, is fairly common, and is sometimes found over twenty feet long. Rays and Skates abound

and reach enormous size. The Sting-Ray, with flat triangular body and long bony tail, takes long leaps out of the water, appearing almost to fly. Beaked-Rays, Devil-Fish and Eagle-Rays are all fairly abundant, and an Electric Ray occurs. The catching of Sharks and Rays and Skates, which are all used for food, demands particular skill and is a close profession.

Salt-water and fresh-water Eels are very common. Of Cat-Fishes with large heads, smooth skins, and long feelers, there are many species which vary much in size, one variety, called *Pla Tépong*, being one of the best of all edible fresh-water fishes. Flying-fishes abound in the waters of the Gulf. There are many species of Carp and the Indian Hilsa is found. Bream, Red-Mullet, the Mango-Fish, two or three kinds of Sole, several round-fish, flattened longitudinally (*Pla Chulamit*), the *Pla-Kapông*, a fish of salmon-like appearance and habits, and two or more species of small Pilchard (*Pla Tu*), the Horse-Mackerel and the Bat-Fish, are amongst the most common sea-fish used for food. The Spoon-Fish (*Pla Chaun*), one of the Snake-headed fishes, is very common in the canals and flooded rice fields of the interior, and is one of the species which, when the water dries up, dives into the mud and remains there below the dry, baked surface all through the hot weather, emerging again when the returning rains once more bring the floods.

Besides the above there is a host of species ~~more~~ remarkable for their colouring and habits than for their qualities as food. Among these are the gorgeous blue Emperor-fish; the Sucking-fish, which attaches itself by a sucker on the top of its head to sharks and other big fish, apparently for convenience of travelling; the Climbing Perch which can live out of water and makes long overland journeys; the Archer fish, which brings down flies, hovering or seated on a leaf above it, with a well-aimed drop of water shot from its mouth; the Siren fish, which attaches itself to boats and other

immersed bodies and can be heard grunting down below with ventriloquistic effect; the celebrated Fighting-fish, a red, pugnacious creature, about two inches long, caught in the marshes and kept in a glass jar where it fights terrific duels with rivals of its own species, and the Mud-Skipper, a scaleless fish, with protruding eyes and with the pectoral fins adapted for walking, by means of which it is in the habit of hopping and running on the mud-banks at low tide, thus passing about half its life out of water.

Invertebrates. This enormous section of the animal kingdom, though well represented in Siam, can' only be treated very briefly here.

The Molluscs include many Limpets and land and water Snails, and several species of Chiton. Among Cephalopods are species of Sepia or Squid and Octopus. In the month of April a small Squid swarms near the shores of the Gulf, and immense numbers are caught at night with nets and torches, and consumed by the populace with much immediate relish and subsequent internal discomfort. The *Lamellibranchiata* include many families of bivalves, containing species of all shapes and sizes. These are generically termed " Hoi " in Siamese, and many, including a very small and a very large oyster and several mussels, are excellent food.

The Arthropods are extremely numerous in all branches. Of Crustaceans there are several species of ~~Prawn~~, including the blue, long-legged freshwater variety. The common lobster, however, is absent. The Crabs are largely represented; Swimming Crabs, Land Crabs, Burrowing Crabs, Hermit Crabs, are all numerous and are of all shapes and sizes. Two species of the repulsive-looking tailed King-crab or *Limulus* are common in the Gulf. A tiny burrowing crab with one claw exaggerated to three times the size of its body and the other suppressed, infests the banks of all brackish rivers. The Land crabs frequently destroy large areas of rice crops. Barnacles and other parasitic

crustaceans are common, as are numbers of Phyllopods and similar tiny animals. The Arachnida are very numerous. Species of the family are found everywhere on land and in water, under dead leaves, in meat, fruit and in all putrid animal or vegetable matter. Numerous forms, such as the itch causing animal and the Tick, are parasitic upon men and animals, and many species are of microscopic size. The Phalangids, with their long slender legs which come off on the smallest provocation, are represented by several species.

Of Scorpions and pseudo-scorpions there are many species, the latter being all very small and scarcely noticeable though they inhabit houses in large numbers. The big, black scorpion is common, as are two species of the smaller, brownish-grey creature, both the latter poisonous, but not dangerously so. *A harmless dark-brown scorpion-like animal with non-flexible tail, found in gardens where it hides under flower pots and in other cool corners, is probably a *Thelyphonus*. The number of species of Araneids, or true Spiders, is very great. Tarantulas, House-spiders, Green, Blue, White, Red spiders, Armour-plated spiders, Jumping spiders, Trap-door spiders, are all common. The large House-spider runs down his prey which consists of cockroaches, *et hoc genus omne*. The Jumping spider leaps upon his victim with the utmost ferocity and precision and from an incredible distance. Many of the coloured spiders lie in ambush in the hearts of flowers to capture unwary flies in search of honey. A black and yellow spider spins a circular web so strong as to entangle and hold the largest beetles. Some delicate-looking yellow spiders are aerial navigators, sailing the air on windy days mounted on a yard-long thread of web of their own spinning.

The Insects, by far the largest class of the Arthropods, inhabit Siam in vast numbers. All the nine orders are represented, some of them in great variety of species.

Of Bees, the great Black Boring Bee, the Honey Bee and a diminutive species that establishes colonies in the posts and walls of wooden houses or in dead trees, are the most common. Wasps and hornets are very abundant and are often of beautiful colouring. Many of these build communal nests dependent from the branches of trees or from the undersides of leaves, but the majority either deposit their eggs in small holes which they afterwards close up with mud, or in little mud cells which they build in corners against stone or other hard-surfaced substance. These latter species all place a stock of food, consisting of various animalculæ, in the cells to provide nourishment for the larvæ when hatched. The commonest form of this food is the Grass Spider, half a dozen of which, captured and stung to a comatose state, are placed in the cell with the egg and remain alive until eaten by the larvæ. Many wasps, however, prefer green caterpillars or crickets, flies or even bees, as food for their offspring, all of which are captured and treated in the same manner. At certain seasons of the year dwelling-houses are invaded by these cell-making wasps, who fill up all keyholes and persistently plaster their little mud cells into every convenient corner. The Ruby-tailed fly, a handsome green wasp with a dash of red at the end of the abdomen, does not build a cell itself, but desposits its eggs in the cell of one or other of its ~~cells~~ ^{cells} just before the last piece of mud is applied to close up the aperture. The egg thus intruded, hatches into a larva which not only consumes all the food placed in the cell but eats the rightful occupant as well.

The species of ants have not been enumerated, but at least five are commonly found in all dwelling-houses where, in spite of continual raids upon fruit, sugar, etc., they are tolerable on account of their scavenging propensities and of the interminable war which they wage against cockroaches, crickets and flies. The

big Tree Ants or Karinga live in nests made of leaves stuck together with a webby substance of their personal contrivance, are very fierce, and deliver a painful sting. Several species of large black ants live in the ground and one, with a red band round the waist, gives a sting almost as bad as that of the English wasp. The Beetle family is well represented. Stag-beetles, Tortoise-beetles, Rhinoceros-beetles, Soldier-beetles, Glow-worms, Wood-borers and many kinds of Chafer abound, as do a number of minute beetles parasitic upon other insects. Chick-beetles (Elatridæ), which when lying on the back apparently helpless, spring violently away by means of a sudden bending of the body, are common. Fire-flies (Lampyridæ) are very common in nearly all parts of the country and are always to be seen at night, either singly or congregated in large numbers in and around some particular tree which, by what is evidently concerted action, they illuminate with flashes of light repeated in regular pulsation. Weevils are numerous and some species are very large. Ladybirds of many species are also common. The Siamese beetles are of all shades of colour, black, green, blue, yellow, red, brown, either uniform or arranged in spots or stripes, the *Mouhotia Gloriosa*, a very large black and red *Carabus*, being one of the most beautiful. The prosternum of the different species is developed into all manner of quaint shapes and sizes and the antennæ into all sorts of lengths.

The Rhinoceros beetle (*Oryctes rhinoceros*) and a large red weevil (*Rhinchophorus ferrugineus*) together constitute a formidable danger to coconut and other palm trees. The former when full grown attacks and penetrates the soft heart or "cabbage" of the tree, where it eats the newly-forming leaves. Into the hole thus made the female of the red weevil follows and deposits its eggs, the larvæ resulting from which complete the work of destruction begun by the beetle. Without the beetle the weevil is practically harmless

and the damage done by the beetle alone seldom has fatal consequences. Whole districts, however, have occasionally been entirely denuded of palm trees by the concerted action of the two pests.

Mosquitoes, Gnats, Midges and "Daddy-long-legs," House-flies, Blow-flies, Flesh-flies, Bot-flies, Gad-flies are all unpleasantly numerous, and the same may be said of the Flea though the species of the last which feeds upon man is not recognised in Southern Siam.

A Monograph on the Butterflies of Siam written by E. J. Godfrey, F.E.S., and published in the Journal of the Natural History Society of Siam in 1916, gives 371 species as occurring in the country. To this number the subsequent researches of this gentleman have added a further 130 species and there is no reason to suppose that considerable further additions will not in time be made. *Napilionidæ*, *Pleridæ*, *Nymphalidæ*, *Lycaenidæ* and *Hesperidæ* are all represented, *Nymphalidæ* being the most numerous as to species and the most widely distributed. The known butterflies include several that are peculiar to Siam and at least four species hitherto entirely unknown have been established recently. In the equable Siamese climate there is no period of hibernation of butterflies, the cycles of reproduction succeeding each other practically without interval. Individuals produced during the dry weather are, however, delayed to a certain extent, ~~chiefly~~ by the absence of food for the larvæ, and are smaller and fewer in number than those produced when vegetation is more abundant. The difference in size and in richness of colouring between the dry and wet season forms of the same species is frequently remarkable.

The study of the Moths of Siam is a long way behind that of the Butterflies. Nevertheless, good work in this direction is being done by the Natural History Society, results of which will doubtless appear in due season. The number of species and varieties of Siamese

moths is immense, a conservative estimate placing them at well over five thousand. The moths vary greatly in size, from the Atlas, which sometimes exceeds ten inches across its outspread wings, to the *Phyllocnistidæ*, which seldom attain to a quarter of an inch. Many of the species are very beautiful but by reason of their habits they seldom come to the notice of the casual observer. They are the determined enemies of the farmer, for it may be said that every plant that is cultivated in Siam is the particular food of at least one species of moth which seldom fails to appear in more or less force wherever such plant is grown. Rice, as being the principal cultivated plant of the country, supports quite a number of species, e.g., *Cirphis*, *Spodoptera*, *Sesamia* and *Remigia*; Tobacco has its enemies in *Phosia* and *Chloridea*; *Penicalia*, *Achaea*, *Altha* and others play havoc with the Castor plantations; *Eublemma* eats the brinjal plant; *Diatraea* the Sugar-cane, and so on through all the list of agricultural products. The cultivator, who classes the larvæ of all moths as one under the single term "worms," does nothing to curtail their ravages from fear of committing the sin of destroying life. Consequently the said ravages sometimes assume alarming proportions, amounting occasionally to the total destruction of crops over considerable areas.

The order which includes the Caddis Flies is represented by several species of both aquatic and land insects. The larvæ of most of these live in cases constructed of particles of the material most easily obtainable, fastened together with a tough web-like substance. Some of the cases are made of stones, some of scraps of dead leaf, some of little bits of stick, and some of dust found in the corners of dwelling-houses. Mostly the occupants carry their cases about with them but a few are stationary. The larva of an Ant Lion, which belongs to this order, is common in the dry, fine soil under raised dwellings, and in other

sheltered spots. It has no case but, burying itself about an inch in the ground, kicks up the soil until a little pit is formed, at the bottom of which it lies with its strong mandibles extended. The unwary ant stepping on to the side of the pit invariably slips on the loose soil, rolls straight into the waiting jaws below and is promptly devoured.

The Locusts, Crickets, Mole-crickets, Stick-insects, Mantis, Earwigs, Cockroaches, White-ants, Stone-flies, Dragon-flies and other groups included in the order *Orthoptera*, comprise the most abundant forms of Insect Life in Siam. Merely to enumerate the known species of the Locusts and Crickets of all shape, colour and size, of the various Mantis from the minute brown devourer of microscopic flies to the five-inch-long, green monster with wicked eyes and horrible spiked forearms whose relentless embrace means death to even the largest of insects; of the Earwigs, Cockroaches, White-ants, and the hosts of Ephemeral Flies which embitter human existence, and of the gay Dragon-flies, blue, green and scarlet, the slayers of mosquitoes, would occupy far more space than is here available and cannot be attempted.

Of Bugs, Siam has a large variety. Some are aquatic, others land insects; some suck the blood of animals, others the juices of plants; some have wings, others are wingless; some are skippers, others not; some are instrumentalists like crickets, others are silent, but all alike are repulsive to the eye and offensive to the nose of man. One of the large common bugs is a brown monster about two inches long, armed with two heavy claws, with a hard, flattish body shaped like a triangle, from the apex of which an acrid and most villainous-smelling fluid is discharged with disconcerting accuracy at the unwary investigator. The Bed-bugs, the Cuckoo-spittle Bugs and the *Aphidæ*, or Plant-lice, also belong to this large class.

The remaining orders of Insects are represented by

several species, prominent amongst which is the "Silver Fish," which eats cloth or paper without discrimination and is usually to be found lurking in the binding of books.

The Myriapods, the last of the Arthropod group, are represented in Siam by various Chilopods, some of which grow to great size, and by several Diplopods. The Chilopods are poisonous centipedes which sometimes attain eight inches in length and one of which is highly phosphorescent. The Diplopods include the *Spirobolus*, a harmless and very common centipede which rolls up when disturbed and relies solely upon its unpleasant odour as a means of defence, and many species of woodlouse. The Diplopods are all vegetable eaters.

Of the great division of the animal kingdom below the Arthropods, sometimes comprehensively termed the "Apathetic Animals," practically nothing is known as regards Siam. Doubtless Worms, Radiarians, Polyps and Infusorians are as numerous here as elsewhere, but for want of knowledge it is not possible to do more than enumerate the more evident forms. These are the earthworms, intestinal worms and other allied genera, the leeches, of which two species are common, Sea Anemones of the most diverse colour and shape, Beche-de-mer, which are taken in large numbers in the Gulf and are much prized as food, and sponges of many kinds, as well as *Coralline* growths.

GEOLOGY AND MINERALS.

Geology. A glance at an orographical map of Siam reveals the country as roughly a plain of comparatively low elevation sloping away southwards and eastwards from mountains on the West and North, with here and there a short range or an isolated height rising above the general level. The great range on the west extends

almost unbroken from the extreme south of the kingdom in the Malay Peninsula to the most northerly point above Chieng Sen on the River Mehkông, and thence continues northwards, through the British Trans-Salwin Shan States into China. The whole of this great range appears to consist of the remains of enormously-thick limestone beds, probably of the carboniferous age, with metamorphic rocks, gneiss, micaceous and siliceous slates and other schistose formations resting upon granite which is highly intrusive and to the action of which the schists are doubtless owing. The summits of the range are mainly granite and the slopes and foot-hills limestone. All through the Malayan Provinces and in the Rajburi district this is the case, but below the limestone beds in the last-named locality are found hard and soft sandstones, probably of Devonian age, though, in the complete absence of investigation for fossils, this last is by no means certain. In this neighbourhood the limestone beds stand up, highly tilted, out of strata of later formation, in an irregular line of precipitous hills parallel with the main range and assuming all sorts of heights and grotesque shapes. Further north, in the Raheng district, the limestone has become thicker and forms the major part of the range, the granite appearing through it less often than in the south. This is also the case in the Chieng Mai district and along the range to Chieng Sen though all through this last tract, outcrops of the underlying sandstone and slates are met with. In many parts of its length, the limestone beds of the great range are found highly crystalline, and in several localities a good white marble has been formed.

All across Northern Siam from Chieng Sen down to Pitsanulok the series of hill ranges lying north and south, spurs of the great mountain masses of the far north, present very much the same geological character as does the western range. Everywhere are

seen highly-tilted limestone and red-sandstone outcrops, through which the numerous rivers cut their way, with occasional appearance of granite and the accompanying metamorphic formations. A basaltic outcrop occurs in the extreme North with sapphire-bearing gravel in close contiguity. A series of well-defined faults occurs right across this district in a north-west and south-east direction. Two small volcanic vents were observed by Warrington Smyth near Hongswadi, which, in 1893, were mildly active. A considerable amount of alluvium covers the valleys of this district, composed of a clayey soil with strata of quartz sand.

The geological formation of Eastern Siam is peculiar. Practically the whole district is an elevated shallow basin contained within hills of limestone, red sandstone and laterite. On the north and to the westward these hills are between one and two thousand feet elevation, chiefly limestone containing calcite and quartz in abundance, with granite and micaceous schists showing here and there, but east of the site of the ancient city of Chieng Kong the strata are chiefly of red sandstone with conglomerate also apparent. Where the course of the Mehkông turns from east to south, the limestone again appears and continues to form a barrier of ever-decreasing height between that river and the basin of Eastern Siam until the junction of the Nam Mun with the main river is reached. Here the great masses of limestone which form the southern boundary of Eastern Siam begin, thence run away westwards, leaving the plain of Battambang and the Thalé Sap lake to the south, and afterwards turn northwards overlooking Central Siam to the west. This limestone is rich in calcite and quartz and rests upon sandstone beds, the outcrop of which is frequently met with. The western boundary of Eastern Siam is marked by limestone hills also, in which gold-bearing quartz-veins have been located, interspersed amongst

sandstone outcrops and beds of laterite. The interior of the basin is covered with alluvium in which lateritic soils and quartz-sand prevail, covering laterite beds which appear to be of great extent.

Central Siam is nearly all alluvium, composed of clayey soil with strata of quartz-sand, deposited upon limestone beds to the north and west and upon a marine sand in the more central parts. Every here and there limestone obtrudes through the alluvium, as at Chainat, Phrabat, and Krabin. On the east coast of the Gulf granite appears at Anghin and at several spots further down, as Lem Tun and Kaw Kraim, the latter an island close to the mainland, near which a submarine volcano was observed in activity by Mouhot in 1860. Still further down the coast the great mountains of Kao-Sabab, Kao Sai Dao and almost the whole of the Patat range are formed of granite intrusions with the usual accompaniment of gneiss, mica slates and various schists. There is also an appearance of what seems to be millstone-grit in this vicinity. Here occur, in the neighbourhood of Chantabun, basaltic outcrops containing much crystalline corundum and also augite, with gem-bearing gravels, again, as in the far north, contiguous to the basalt.

From the foregoing it will be seen that the chief geological characteristics of Siam are immense beds of limestone rocks resting on sandstone, very much foliated and broken by frequent intrusions of granite and other eruptive rocks, more especially in the south. Owing to the absence of any systematic study of the palæontology of the country and the consequent rudimentary nature of our knowledge of the subject, it is difficult to determine the age of the limestone and sandstones, but it seems probable that they are principally Old Red Sandstone, Devonian and Carboniferous formations of the Palæozoic period. The Cambridge Expedition at the end of last century was successful in identifying, by means of fossils, some of

the beds on the west coast of Southern Siam as belonging definitely to the highest Carboniferous Limestone series.

Here it may be remarked that a French geologist, Dr. Massie, did many years' good work in the Mehkông valley, and that, but for the deplorable death of that enthusiast in the midst of his labours, very much more would undoubtedly be known concerning the geology of this region than is now the case.

There are abundant signs of a general upheaval of the whole country, which process is probably continuing at the present time. Thus, not far from the shore at the head of the Gulf of Siam, a marine deposit containing numerous recent shells lies upon the surface of the land some two or three feet above the sea level and has apparently no alluvium upon it, while further inland a well-marked beach, eight feet above present sea-level, crosses the Central Plain and indicates what was probably once, and apparently not long ago, a river bar. Again on the island of Kaw Mun there are clear traces of sea action on rocks which are now considerably above sea level, while in Southern Siam strata of vegetable matter are in many places found below marine deposit, and old beaches occur, sometimes at a considerable distance inland.

Minerals. *Gold.* Fine grains of gold are present in the sands of almost all the streams of Siam, and the metal is washed in many localities with more or less system by the country people. Nuggets, sometimes as much as five or six ounces in weight, are occasionally found in the river beds and on the alluvial flats of Southern Siam, and the gravels of the valley of the Nam Nigau, a tributary of the Mehkông in Northern Siam, which are worked by the neighbouring hill-people, have also yielded some fair-sized specimens. This alluvial gold, so widely distributed, is no doubt derived from the quartz-veins which are found in all directions running through the limestone. It seems

probable, also, that gold exists in many of the crystalline schists which underlie the limestone. The people of the country are usually ignorant of the fact that the gold which they find in the alluvium must have come from a matrix, and no systematic search for lodes has ever been made. Consequently gold *in situ* has scarcely ever been found and never in such quantities as to pay for working.

Silver. Occurs in galena in many parts of the country and was formerly mined. At the present day is not worked anywhere.

Tin. The great range of granite, sandstone and limestone, which forms the Malay Peninsula and which reappears in the Dutch islands of Lingga, Sinkep, Banca and Billiton, further south, produces some two-thirds of the world's tin supply. Of this by far the greater quantity comes from the Malay States which are under British rule, but from 8,000 to 9,000 tons are produced annually in that part of the range which passes through Siam, and it is probable that future development will prove this northern section to be as rich in the metal as any other part. As every tin miner knows, whenever granite occurs, there tinstone (cassiterite, or oxide of tin) may be found, more especially where the granite is in contact with schists or slates or sandstone. Such is the formation in Cornwall and throughout the Malay Peninsula. The granite, where it has intruded into, or through, sandstone is found to be stanniferous, containing oxide of tin in small black or brown crystals as one of its essential ingredients. In the Malay Peninsula, where the granite is in close contact with sandstone, as intrusive blocks and as veins, oxide of tin is peculiarly plentiful. The granite being coarse-grained and loose, disintegrates rapidly and hence, amongst the alluvium at the foot of the mountains, are found great deposits of granite sand and tinstone crystals. This is washed in all parts of Southern Siam, but the island of Thalang,

Junk Ceylon, or Puket, just off the west coast, contains the most famous mines. Here, ever since the ninth century A.D., or even earlier, tin has been mined, at first by colonists from the south-eastern shores of India and later by Chinese. The whole island is one vast tin-mine and has in course of time had almost the whole of its surface, including that on which the various settlements are planted, turned over in the pursuit of the metal. Traces of tin have been found all the way up along the great western range to the northern confines of the kingdom and beyond, and also in the valley of the Pasak in Central Siam, but no working of the metal has yet been undertaken farther north than the neighbourhood of Rajburi.

Copper. The very limited amount of mineral prospecting which has been done in Siam has, however, been sufficient to reveal the presence of copper in several localities. The principal of these are the valley of the Nam Wa, near Nan, and at Lakon, both in Northern Siam, and at Chan Tuk in the Dong Phaya Yen Mountain, east of Central Siam. At the last-named place there is a lode lying north and south, richly mineralized, which has been worked by the country people for a very long time. It contains copper, both native and as carbonate of copper. Muang Kut, in Eastern Siam, is said to be the site of an ancient copper mine of great value which, however, was destroyed by lightning and has never since been reopened.

Lead. Veins of Galena have been found in various parts of the country and in Southern Siam have been worked in a tentative manner by Chinese, but sooner or later abandoned. Remains of the old workings, in the form of heaps of discarded Galena, are to be seen in many places. It seems that the miners were looking for tin ore, the properties of which they understood, and believed that Galena, of the properties of which they were totally ignorant, was a kind of half-formed,

or malformed cassiterite and that where the one was, there they would be likely to find the other. When these hopes were not realized they deserted the mines, leaving the Galena they had extracted, which they called "Black Tin," to be appropriated by any one who might want it. Later on, European prospectors cast covetous eyes on those heaps of discarded ore and more than one effort was made to work them into propositions for home consumption. Transport difficulties upset them all, however, until about 1910, "Black Tin" dumps in the Kanchanaburi district lead to the discovery of a field of Galena so large as to overcome the expense of carriage. The coming of the great war stopped the development of this discovery, but since the return of peace there have been signs of a revival.

Tungsten. About fifteen years ago this metal, in the form of Wolfram and Schulte was discovered in Southern Siam. As Germany was obtaining all the Tungsten she wanted from British Territory at that time, and as the rest of the world chose practically to ignore the value of this mineral, the Siam deposits aroused very little attention. But when the war broke out, the Allied Nations were taught by an exceedingly painful process the indispensability of the mineral, and rushed to buy it wherever possible in a manner that caused an immense boom in Tungsten mining. Active prospecting soon brought to light extensive deposits of both Wolfram and Scheelite in the Southern Provinces of Siam and a considerable industry and export grew up. Several fortunes were made out of the stuff, and the department of Mines for a time was inundated with applications for Wolfram mining leases, but, with the coming of peace, the demand for the metal stopped altogether and within a year of the armistice the industry was absolutely dead.

Zinc and Antimony have been found. Indeed, in Northern Siam, the latter is common. Neither have,

however, been worked at all seriously. *Molybdenum* has also been identified, specimens of Molybdenite being frequently brought to the Department of Mines and Geology for identification.

Gems. It has already been said that in the extreme North of Siam and also in the neighbourhood of Chantabun near the eastern shores of the Gulf there occur gem-bearing gravels and that in both cases basaltic rocks are found in the neighbourhood. The Gem-bearing gravels are alluvial and consist of the detritus of disintegrated basalt, a clayey soil of decomposed rock, through which is disposed a great quantity of larger fragments. The gravels of the north run from five to eighteen inches thick ; those of Chantabun are as much as three feet through. Warrington Smyth, who examined both districts some five and twenty years ago, found corundum and sapphires with crystals of quartz and small garnets in the northern or Chieng Kong district, and corundum, rubies and sapphires with garnets, topaz and quartz crystals in the gravels of Chantabun. Spinels were found in both districts. He was led by the appearance of hercynite crystals and augite in the basalt to the conclusion that this rock must be the matrix of the gems, though he did not actually find any in it.

Iron. Iron occurs in Siam as pyrites very widely distributed, as red hæmatite at Chieng Kawng on the Mehkông, and as limonite in the Nam Pi valley north-east of Pichai, and at Lakon Lampang in Northern Siam, and elsewhere. The cubic crystals of pyrites have frequently been mistaken by natives for gold and have led to many a wild-goose chase on the part of concession hunters. The red hæmatite deposits of Chieng Kong are of great extent but do not seem to have been worked. The limonite of the Nam Pi and of Lakon Lampang, which appears as a surface ore with quartz underlying it, has been much worked in the past.

Petroleum. The only undoubted occurrence of petroleum in Siam is in the Muang Fang district of the north. Samples from the wells, which exist here over an area of some twenty square miles, have been analysed more than once and have been pronounced to be oil of a peculiarly rich quality. Hitherto, however, a systematic opening up of the wells has been rendered quite impossible by the immense difficulties of transport which must first be overcome, but with the extension of the railway to the north there may possibly be a future for the petroleum of Muang Fang. Rumours of the existence of oil have occasionally been received from Southern Siam but have not hitherto been confirmed.

Coal. Outcrops of inferior lignite have been known in Siam for many years and efforts have from time to time been made to pursue these in the hopes of finding good coal. Much time and money have been spent in development and experiment but without any valuable result until about the year 1915, when an outcrop in the Lakon district of Southern Siam was examined and found to consist of black coal apparently suitable for most purposes other than for use as bunker coal. More recently an outcrop of black coal was found in the Nakon Sawan Circle of Central Siam. There is talk of working both these seams.

Salt. About two days' journey northwards from Nakon Tai, a village on the site of an ancient city in the Pitsanulok Circle of Northern Siam, are situated the best known salt deposits of Siam. The salt is found from twenty to forty feet below the surface and is extracted by means of brine wells. The brine, on evaporation, yields a large percentage of fairly pure salt. It is packed in small neat baskets each containing about six pounds weight and is transported on pack-bullocks to all parts of Northern Siam and far into the French territories to the eastward. In Eastern Siam, in the central basin, there are extensive salt

marshes whence a considerable quantity of salt is obtained by evaporation. It is, however, along the northern and western shores of the Gulf that the main supply of Siamese salt is obtained. Here certain low-lying level lands, near the sea and subject to flood once a month at highest tide, are divided up into dammed fields on which the monthly overflow of sea-water is captured and retained. When evaporated to about half its original volume, this water, rich in salt, is run off into smaller fields where it is allowed to evaporate to dryness. The process is repeated every month during the dry weather, the crust of salt on the surface of the small fields being removed whenever thick enough and collected into heaps for sale. Needless to say, an unseasonable fall of rain interrupts the business and sometimes causes heavy loss. The State of Pattani in Southern Siam annually exports a large quantity of evaporated sea salt, while a great part of the salt consumed in Bangkok comes from the salt fields near the mouth of the Menam Chao Phya.

Saltpetre. In the limestone mountains of Siam there are many caves in which, from time immemorial, legions of bats have lived. Consequently there is an accumulation on the floors of such caves, of large quantities of bats' dung, or guano, which, in many localities, as at Trang and all through the hilly regions which form the east and west boundaries of Central Siam, attains a thickness of several feet. By the simple process of boiling this guano with wood-ashes, a remarkably pure saltpetre is obtained, which, having been used locally from the earliest times, has now become an article of export.

PART II.

THE RACES OF SIAM.*

RACIAL DIVISIONS.

SPECULATION as to the "aboriginal," that is, the very first, inhabitants of a country old in geological time, is apt to prove but an unprofitable occupation, for the reason that, however far back inquiry may be carried, the investigator can arrive at no point where clear proof may be said to exist for the assumption that there were really no human inhabitants of such country at some still more remote period. The most superficial study of the ethnological literature of almost any country will show how the calculations and deductions of scientists and their resultant pronouncements concerning "aboriginal" populations have constantly proved mistaken in the light of subsequent research.

But apart from the fruitless quest of the aboriginal, the study of ethnology, the origin, evolution, rise, decline, absorption and disappearance of races, the construction and disruption of nations, all the movements of humanity, though leading always back into mists of the past which there is no dispelling, is a pursuit than which there are few more fascinating. Its text books are the physical appearance, languages, traditions, written character and history of the races of mankind, whether young and healthy, or old and decrepit, and nowhere in the world is a better library of these to be found than amongst the mountain ranges, the secluded valleys and the wide plains of Further India.

In Siam the earliest evidence of the existence of man is furnished by the axe-head celts which have occasionally been found in Southern Siam and on the Korat

Plateau. Some of these differ from the Neolithic celts found in Europe and America in that, though finely polished, they are ground to a chisel-like edge on one side only and have prominent square-cut shoulders. Others are of the usual smooth shape, ground on both sides, similar to those found in Assam, Burma, Yunnan, and Kambodia. Their general workmanship would seem to indicate that they belong to the later Neolithic Period.

It is, of course, impossible to do more than imagine the appearance and condition of the makers and users of these stone implements ; a race of primitive men who must have lived in Siam long ages before the advent of the most ancient people of whom any definite knowledge exists. It may be supposed that they inhabited a hilly shore surrounding a great gulf which covered the whole central plain of Siam, for no celts have ever been found on the plain, and moreover there is evidence in the traditions of comparatively modern races, borne out by the movements of the land at present visible, that the central plain has appeared above the level of the sea almost within historic times. Nothing more can ever be known of those early men than that they existed and made these implements, and there appears no reason to conclude that they were aborigines, since geology allows the existence of man many ages before the later Neolithic Period.

Amongst the mountains of Southern Siam there exist at the present day certain small, black, curly-haired men, differing greatly from all the other tribes and races of the country. The little creatures are, however, evidently related to the natives of the Andaman Islands south of Burma and not very far west of their own home, and also to certain hill tribes of the Philippine Islands. They are clearly of the Negrito race which writers are content to call the aborigines of India. These tribes, whose habitat in Southern Siam extends far down the Malay Peninsula,

are probably the sorry remnant of a once numerous population, successors to, and possibly descendants of, the Neolithic men of Siam. They are known as the Semang and are usually confounded with the Sakai, a tribe of somewhat similar habits but of very different physique, which occupies the same mountain range further to the south and chiefly beyond the borders of Siam.

It is now the very generally accepted theory that during the last few thousand years Siam, and in fact the whole of Further India, has been subjected to periodical flooding by successive waves of humanity, set moving by natural or social upheavals of population far to the north in Central Asia. We may imagine, then, the Negrito population of Siam, or rather of that part of what now constitutes Siam which was then above the sea, leading their primitive existence through countless generations, their condition scarcely advanced beyond that of their celt-wielding forerunners, until there came down upon them one of these great waves of population which broke them up, thrust them aside into the remoter hills, all but exterminated them and finally settled itself down in their place. This irresistible tide of humanity was the advance down all the rivers of Further India of the tribes which constituted what is conveniently called the Môn-Annam family, the savage ancestors of the Môn or Talaing, the Khmer or Kambodian, and the Annamese civilized races of yesterday and to-day, and of a host of lesser tribes which still persist in quasi-barbarism.

Of this intrusion, which must have begun thousands of years ago and which doubtless took many centuries to complete, the modern representatives of the intruders have absolutely no tradition, and it is only through reasearches based upon the discoveries and suggestions of Garnier, Forbes, Max Müller, Grierson and others, that the secret of the origin of the great Môn Annam family has recently been explained upon scientific

deductions of a soundness which it is difficult to gainsay. These studies reveal the fact that many tribes found scattered among the mountains which skirt the Irrawaddy and the Mehkông valleys, mutually differing in many characteristics and whose traditions point to their having occupied their present seats since very remote times, are of the Môn-Annam stock. They are found in Central Assam if not still farther north and west, in the Northern Shan States of Burma, in the districts of the Mehkông where England, France, China and Siam are now close neighbours, and they swarm among the mountains in the north-west, north and east of Siam. Their languages not only indicate their relationship with each other and with the Môn and Khmer of to-day, but also bear evidence, sufficient to satisfy most authorities, of being old forms from which the languages of the more civilized branches of the family were derived. There are those who aver, apparently with good reason, that the languages of the Môn-Annam family have points of similarity with those of the pre-Dravidian Kolarian races of India and that this fact points to a common origin of the Kolarian races and the Môn-Annam, but this is disputed by others who contend rather that in remote times the Môn-Annam ancestors, inhabiting the wilds of far-away Tibet, may have come into contact with the progenitors of the Kols, and that thus the two races, though of different origin, have acquired some slight similarity of speech.

The theory of a descent of the Môn-Annam family from the north is not unopposed, for some students of the matter maintain that the arguments used to prove that descent may be applied with equal success to a theory of ascent from the south, and that the originals of the Môn-Annam family may, after all, have arrived in Further India by sea from India or elsewhere and have spread inwards and northwards from the coasts round about the mouths of the great

rivers. Colour is lent to this argument by the fact that in comparatively recent times, that is not more than about 2,000 years ago, the countries inhabited by the Môn and the Khmer were colonized by members of the Dravidian races of Telingana in India, who reached these countries by sea. These adventurers, however, were already highly civilized people, well used to seafaring, and they found the Môn-Annam tribes, amongst whom they came and settled, in a state of the rudest barbarism and most complete ignorance. There is also evidence, furnished by the annals of the early Lao State of Wieng Chan, far up the Mèhkông River, that at about this same period the Lao were already fighting against the wild savage inhabitants of the hills round about them, which inhabitants, it is now known, were hill-tribes of the Môn-Annam family. Hence if this family came to Further India by sea, it must have come very much earlier than 2,000 years ago, for its members had already spread far to the north by that time. It is difficult to imagine either how or why a people in such an elemental state could have left their homes and put out to sea without the least knowledge as to whither they were bound, or how, having done so, their offshoots should have wandered so far north as the upper Mèhkông and the North Shan States; whereas, more especially with the analogy of subsequent Tibeto-Burman and Lao intrusions, there is nothing at all repugnant to the theory of a descent by land from the north. Against the idea that these races may have arrived on the mainland from India is also the indisputable fact of their Mongolian origin. In fact, though exhaustive linguistic research leaves certain learned professors undecided as to whether the Môn-Annam family came into Further India by land from the north or by sea from the south or south-west, it is now generally thought that the probabilities of the latter source of origin are small and the theory of immigration from the north is generally

accepted. This, of course, has nothing to do with subsequent movements of individuals and groups of the race to and fro in Southern Siam, the Malay Peninsula and the Malay Archipelago at much later periods.

At first, probably little more advanced than the Negrito population which they found there, the Môn-Annam wanderers, on arrival in Further India, may have led the same sort of very primitive existence as their predecessors, settling among them and finally ousting them from the country more by the pressure of increasing numbers as more tribesmen arrived, than by the exercise of any superior arts or knowledge. In time they came to occupy the whole littoral of Further India and, as their numbers still continued to increase, began to overflow from the mainland into the adjacent islands, working away to the south and east through the Malay Archipelago, and there is reason to suppose that the Hainans (or Hailams), the Javanese, the Bugis, the Macassars, the Tagalas of the Philippines, the Dayaks of Borneo and a host of other more or less related tribes, are all descended from the Môn-Annam stock, though now largely diluted with Chinese, Indian and Negrito blood. Communication between the islands at the present day is far from difficult and if, as Wallace avers, the whole Archipelago is in a state of subsidence, it is possible that at the time of the incursions of the Môn-Annam there existed dry land, by which the wanderers were able to fare, perhaps a part of the way, through what is now the Malay Archipelago and possibly even further south and east.

The branches of this ancient family now to be found in Siam are the Khmer (or Kambodians), Môn (or Talaiings), Yuan (or Annamese), Lawa, Chong, and the various tribes grouped by the Siamese under the generic term Kaché. The Môn and Khmer are the descendants of those tribes which, imbued with civilising influences brought amongst them by colonists from the south of India, early emerged from the state of savagery and,

achieving considerable enlightenment, spread themselves in a series of more or less independent communities over the plains and deltas of Further India as these gradually rose out of the sea. The modern Malays of Siam, a composite race of comparatively recent evolution, are probably the result of a fusion of the ancient Môn-Annam tribes who occupied the Malay Peninsula, with distant cousins from the islands to the south who, like the Môn and Khmer, had come under the modifying and civilising influences of India, and whom force of circumstances drove back from the south upon the footprints of their early wandering ancestors. The Lawa and Kaché, with their Kamuk, Kamet, Kabit and Kahok clans, are isolated remnants of the same great family which, left behind by the southward tribal movements of past ages, have remained in the hills, and, in the absence of later civilising influences, have retained to the present day much of their original primitive state.

Another wave of population which rolled down from the north over Further India was that composed of the Tibeto-Burman family. This intrusion, which may have occurred any time between 2,000 and 3,000 years ago; was much more recent than that of the Môn-Annam family and many traditions which seem to have originated in the movement are still extant among the present-day representatives of the family. Though the original seat of the Tibeto-Burman tribes has been disputed, there seems to be now a general consensus of opinion that they came from much the same quarter that formerly gave forth the Môn-Annam family, but the Tibeto-Burmans in their descent followed the Irrawaddy River chiefly and the Mehkông River very little, and though they approached the borders of the country which is now Siam, they never really crossed them until comparatively recently, when the Meow (or Meo), the Muh-sö (or Lahu), the Kaw (or Aka), the Lishaw and the Yao, all tribes of probable

Tibeto-Burman origin, made their appearance in the north and east of the country. These tribes formerly dwelt among the hills of Muang Sin, Sibsong Panna, Sibsong Chutai and the neighbourhood, and further north. Disturbances in those parts have caused them to migrate in various directions, and considerable numbers have now made their home in Siam, where they are being constantly joined by more emigrants from the north.

While the Môn and Khmer were spreading themselves over the southern shores of Further India, and before they had begun, under the influence of foreign colonists, to emerge from the state of savagery, the tribes which they had left behind them at different points during their southward trend, were already being driven back into the mountains and brought into a state of partial subjugation by clans of a third great family of wanderers from the north. These were the Lao who, descending from the neighbourhood of the Yang-Tse valley, where the Lao-Tai family had its most ancient seat, had, so long as 2,500 years ago, established a powerful and to some extent civilised State on the banks of the Mehkông River at or in the neighbourhood of Wieng Chan.

These people, whose first southward movements from Western China were probably contemporaneous with those of the Tibeto-Burmans from Tibet, were among the earliest off-shoots of the great family whose modern representatives now people Assam, the Shan States of Burma, Siam and much of the great tract of almost unknown country which lies at the back of French Indo-China and beyond the northern borders of Siam. The Lao Tai inhabitants of the Yang Tse valley must have been very numerous, for not only did they thus early establish kingdoms far remote from home but they also became a power in their own land and for some time bid strongly for the mastery of all China. For many centuries they conducted successful

wars against all their neighbours, but a want of internal cohesion, which appears to have been their besetting weakness, together with other causes, ultimately brought about the disintegration of their kingdom, when their already strong migratory propensities sent them in search of new destinies in distant lands. They were repeatedly attacked by the Chinese, and each attack produced a fresh exodus until, during the thirteenth century, A.D., the Emperor Kublai Khan dealt them a final blow, crushing the old Lao-Tai power and scattering its component parts in all directions. Fugitive hordes entered Assam, where former emigrants had already effected a lodgment, and became the dominant power in that country. Others invaded Burma, where for two centuries a Tai, or Shan, dynasty occupied the throne and held the Burmese in subjection, while down the Salwin and Mehkông valleys and into Siam came band after band of exiled tribesmen who mingled with their cousins already established there, accelerated the fusion between Lao and Khmer which had for long been going on, and in time caused the formation of the race which now occupies the greater part of Siam.

From the date of the overthrow of the last stronghold of Khmer power and the founding of the city of Ayuthia, the Thai or "Freemen," evolved from the union of Lao and Khmer, have been, except during brief intervals of alien conquest, the ruling race in Siam.

The divisions of the Lao-Tai family now to be found within the borders of Siam are the Thai, or Siamese proper, the Lao, inhabiting the former seats of the tribes of their own stock who afterwards developed into the Thai, the Shans, a later intrusion of distant cousins, descendants of the Lao-Tai tribes who settled in the eastern districts of the Burmese Empire in the twelfth century and earlier, the Sam-Sam of Southern Siam, a cross between Thai and Malay,

and the Lü, a small tribe of recent arrival of whom little is known except that their language reveals their Lao Tai origin.

Besides the races already enumerated there are in Siam certain tribes which it is difficult to affiliate with any of the three great families occupying Further India. Of these the most important are the Karien (or Karen) clans which have their seats in the hill-ranges between Burma and Siam. They live chiefly on the Burma side of the frontier, but considerable numbers are found on the eastern slopes of the dividing range through all the western border-districts of Central Siam and extending some way down into the Siamese Provinces of the Malay Peninsula. Of legendary history the Karien have very little, and what there is gives no indication as to whence they may have come, though it is to be noted that they have certain vague traditions of ancient wanderings from some unknown home-land. These traditions do not take them anywhere beyond Burma, but their language, which has a certain affinity with Lao and with Chinese, seems to indicate a probability of their having come originally from South-West China. Some authorities class them with the Lao-Tai family, others with the Tibeto-Burman, and others again place them quite apart from all their neighbours. Captain Forbes has it that they arrived in their present habitat in the sixth or seventh century A.D., after the Môn of Pegu and thereabouts, and the Khmer inhabitants of Siam, had become civilised nations, and it is possible that they were originally regarded by the Chinese as related to the Lao-Tai family and were driven out of China in consequence of this supposed kinship.

Another tribe which has not yet been satisfactorily classified is that of the Sakai, members of which inhabit the mountains of Southern Siam in small numbers, the main seat of the tribe being in the British Malay States. At one time the Sakai, Jakun and

Semang, all wild tribes of Southern Siam and the Malay States, were classed together as Negrito, but though in some ways they resemble each other, by reason, apparently, of long contact, it has recently been demonstrated that the Sakai are certainly not of Negrito stock, while evidence has been produced which seems to point to a descent from an old Dravidian race, the progenitors, perhaps, of the Veddas of Southern India.

The following table shows the grouping of the present inhabitants of Siam.

NEGRITO	Semang.
	{ Chao Nam.
	{ Malays of Siam.
	{ Khmer.
MÔN-ANNAM,	{ Môn.
	{ Yuan (Annamese)
	{ Lawa.
	{ Kaché.
	{ Chong.
	{ Meao.
	{ Muhső or Lahu.
TIBETO-BURMAN	{ Kawi.
	{ Kaw.
	{ Lishaw.
	{ Yao or Yao-yin.
	{ Siamese or Thai.
	{ Lao.
THE LAQ-TAI	{ Ngiou (Shan).
	{ Lü.
	{ Sam-Sam.
UNCLASSIFIED TRIBES ..	{ Karien or Karen.
	{ Sakai.

To these should be added the Chinese immigrants, a very numerous community composed chiefly of Keh and Chow Chien (Swatow) people with a fair

number of Hokkien and Hailam. These last are natives of the island of Hainan and though perhaps partly of Môn-Annam stock, are now hardly distinguishable from the Chinese proper.

POPULATION.

In the year A.D. 1909 the Siamese Government made its first attempt at a census of the whole country. Previously the number of the population had been largely a matter of guesswork and a source of considerable diversity of opinion. Everybody had his own ideas on the subject, arrived at by his own peculiar methods, and estimates varied between five and twelve millions. The reckoning of Bishop Pallegoix who gave the population as six millions in the year A.D. 1854 was probably as near being correct as any.

The Census began with a leisurely enumeration which, by dint of repeated checking and revision, was at length brought within measureable distance of a fairly accurate representation of the number of the people. This was followed by an annual revision of the registers, and it is claimed by the authorities that the figures now given are substantially correct. There is, however, evidence to show that here and there, especially in outlying districts where the intelligence of enumerating officers is not of the first order, errors of more or less importance exist. Moreover, it is known that the first enumeration of Bangkok city gave numbers about 14 per cent. in excess of the truth.

Corrected and revised figures for Bangkok City and suburbs gave a population of rather over 500,000 and a further census taken in 1920 showed 345,000 as the population of the city proper. It was found that in the Capital the number of males exceeds that of females in the proportion of three to two, a curious condition for a community where polygamy exists, but one which is accounted for by the facts that in the foreign

element, which is large, males greatly predominate, and that the schools and military forces of the country tend towards concentration of boys and young men there.

Many causes, such as defective sanitation, the absence of knowledge of hygiene and most determined persistence in confusing medicine with witchcraft, have acted in the past as checks on the growth of the population of Siam, so that increase has been so slight as to be practically imperceptible. But to-day there are very clear indications that the condition of stagnation has passed away and that improved administration, communications and medical knowledge, together with a dawning perception that only by the preservation and increase of the population can material progress be assured, are having their effect. The total population according to the latest revision of the census (1920) is given as not far from ten million souls, of whom Siamese and half-breeds number about 3,800,000, Lao about 3,650,000, pure-blooded Chinese 500,000, Khmer 450,000, Malays 400,000, Môn 60,000, Karien 60,000, and the various wilder hill-tribes, Lawa Kaché, Lü, etc., about 600,000. These figures show a very considerable increase during the last ten years, but they must be taken with caution. It is only a very short while since even the higher and more educated class of official realised that the life of each individual peasant might after all be of some value to the State, a realisation largely due to recent pronouncements by the King, and to the institution of a strong campaign against smallpox, organised, directed and paid for by His Majesty himself. Hence the census returns, which at first were regarded merely as a useless innovation of the new bureaucracy and as such received only a languid attention, have now become important, rural officials vying with each other in showing increase of the people in their charge and few having the temerity to reveal a stationary or a declining

population in their annual returns. It is probable that the total now given exceeds the truth by about five per cent.

The foreign element in the capital, which includes Europeans, Americans, Japanese, Indians, Burmese, Javanese and Malays, amounts to about 30,000. Of Europeans and Americans there are in the whole country about 1,800, chiefly members of business firms, government officials and missionaries. The number of Chinese in Siam has been much exaggerated. Pallegoix estimated it at 1,500,000, and more recent observers have gone further, some of them not hesitating to state that half of the population of the country is Chinese. Such estimates, however, have usually been based upon the number of Chinese to be seen in the streets of Bangkok where the Chinese element is at its strongest, and it has too often been taken for granted that because every other man encountered in the streets of the capital is a Chinaman, therefore the Celestial must be equally prevalent in other parts of the country. As a matter of fact the Chinese number about a quarter of the inhabitants of Bangkok, but this proportion diminishes as the distance from the capital increases, and except where the tin-mining and rice-milling industries have caused the formation of separate colonies, as at Puket and Petriu, is small or altogether absent in most of the rural districts. At the same time there is a strong infusion of Celestial blood in the Siamese themselves, more especially amongst the townspeople and the upper classes, for Chinamen, who have resorted to Siam for commerce and as tradesmen and labourers since the beginning of the seventeenth century A.D., have intermarried freely with the women of the country, their descendants about the third generation or even earlier, becoming indistinguishable in outward appearance from the pure Siamese. Many noble families of the present day trace their descent to some not very

remote Chinese ancestor who, arriving in the country penniless, raised himself by a few years of thrift among a thriftless people, to a position of wealth and power.

NEGRITO.

Semang. The investigations of the Cambridge Expedition which explored the interior of Southern Siam and the Malay Peninsula in 1899, and the subsequent monumental work on *The Pagan Races of the Malay Peninsula* by Messrs. Skeat and Blagden, have added enormously to our knowledge of the Semang. Formerly he was classed with other tribes of his neighbourhood who were collectively known as "Sakai," a Malay word meaning simply slave or servant, as does the word "Ka," applied by the Siamese to all and sundry hill-tribes in Northern Siam. Now it is known that the Semang stands alone, separated from the people surrounding him by a vastly older descent, and represents with his Negrito cousins of the Andamans and the Philippine Islands, and possibly also with the Pygmies of Central Africa, one of the most ancient races of mankind now in existence.

The Semang of Siam probably number about 6,000 in all, and inhabit the mountains at the back of the Chaiya, Sôngkla and Pattani districts. Among these ranges they wander up and down, seldom remaining in one place longer than is necessary to reap the thin crops of rice and millet which they sometimes plant in rough clearings on the hill-sides. The men average about 4 feet 10 inches in height and the women 4 feet 7 inches. Their colour is either chocolate brown or black; the head, when not shaven, is covered with short wool, the forehead is low and round, nose flat and spreading, cheek-bones not prominent, eyes horizontal, mouth wide with lips usually not over thick but occasionally very much so, chin small, and

jaw slightly prognathous. The body is usually well developed with a somewhat protruding posterior. On the whole a decidedly unprepossessing race, judged by standards other than their own; but their bright eyes, vivacious expression, quick, lithe movements and habitual cheerfulness do much to relieve their general ugliness.

The distinctive costume of the Semang male consists of a diminutive loin-cloth made of a stringy fungus common in the neighbourhood. That of the woman is a girdle of leaves and a bamboo hair-comb, the latter worn to avert sickness and other ill fortune. Tattooing is unknown, but both men and women occasionally ornament their faces with lines scratched thereon with a thorn. A Semang house is seldom more than a simple shelter formed of palm leaves stuck in the ground with the tops bent over and intertwined. Now and then, as a result of contact with more civilised races, small huts of plaited palm leaves are constructed, but the wilder Semang frequently do not aspire to a house of any kind, contenting themselves with a lair beneath an overhanging rock or in a hollow tree-trunk. Their weapons consist of bow and arrows, a blow-pipe adopted from the Sakai tribes, and spears of sharpened bamboo slivers. Arrows and blow-pipe darts are usually tipped with a powerful vegetable poison, prepared from the juice of *Antiaris toxicaria*, the celebrated Ipoh or "Upas" tree. Their arrowheads are frequently of iron, obtained from the Malays or Siamese near whom they live. They are skilful and courageous hunters, and all manner of game, from the elephant to the smallest bird, falls to their primitive weapons. Their religion is of the vaguest and most rudimentary character, consisting of little more than the occasional placation of a god called Kaye (the controller of thunder), and of a hazy idea of a paradise and a place of eternal punishment, neither of which seems in any way to affect the

shaping of their earthly lives. Of ceremonies they have next to none. A bare act of barter between a bridegroom and his father-in-law constitutes a wedding, while a burial is no more than a silent shuffling of the deceased into a shallow grave constructed like an underground leaf-shelter. Their music, their dancing and their singing are of the most primitive description. A hollow bamboo beaten with a palm leaf or knocked against a tree trunk, a reed flute blown through the nose instead of with the lips, and a bamboo jew's harp twanged with a monkey's bone, are the musical instruments used, to the accompaniment of which rude songs are chanted and an elemental dance is performed, not apparently in connection with any ceremonial but merely as means of distraction. The Semang usually cook their food, though meat is sometimes preferred raw. They obtain fire by the friction of two pieces of bamboo rubbed together, but the more civilised are possessed of flint and steel, and nowadays trade matches are not unknown to them. They use neither alcohol nor opium but are confirmed tobacco smokers. The Semang are absolutely illiterate, possessing no written character of any kind. Their language is largely made up of words borrowed from the adjacent Malay, and contains also a few words of Môn-Annam origin, the latter resulting probably from prehistoric contact with the ancient tribes of that family.

Countless generations of oppression at the hands of their more civilised neighbours have created in these little people a condition of extreme shyness and timidity towards the rest of mankind. Neither Malays nor Siamese have ever realised that the Semang are as much human beings as themselves, nor can they see any difference between the value of the life of a Semang and that of any lower animal of the more useless kind, and consequently they are always as ready to take the one as the other. Therefore, the Semang seldom

leaves his jungle fastness, and, when visited there by strangers, steals away before them like a wild beast. His "form" may be found fresh beneath a rock, with fire still smouldering and with little bits of basket-work and fresh-picked bones lying about, but the owner will not be met with and, indeed, it is only after long negotiation with a known and trusted go-between that he may at last be induced reluctantly to show himself. It will therefore be understood that as a tax-paying citizen of the State the Semang is a complete failure and, though he would doubtless enjoy the suffrage if domiciled in England, in Siam he is accepted as an uninteresting waif of humanity of no value even as a slave ; in fact, a nonentity. A young male specimen was captured and presented to the King a few years ago. This youth soon learnt to speak Siamese and for some time occupied a place amongst the Court pages, but the life and the climate of the capital destroyed his constitution and he died young.

MÔN-ANNAM.

Chao Nam. Up and down the west coast of the Malay Peninsula, amongst the islands of the Mergui Archipelago and round the shores of Puket Island and the inland sea behind it, may occasionally be seen the primitive boats and squalid encampments of a strange nomadic people known as Chao Nam by the Siamese and Orang Laut by the Malays. They belong to a tribe of sea wanderers which, though small in numbers, is very widely distributed on the shores washed by the seas that lie between Burma and the northern coast of Australia. They have been identified as a part of the very ancient race of pre-Malay inhabitants of the Malay Peninsula known as the Jakun, a race now seated chiefly in the south and south-west of the Peninsula whom they very closely resemble in language and all

physical characteristics, but from whom they have been separated from very remote times.

The tribe at one time was most numerous about the bays and islets round Singapore and Johor, and several of the numerous clans into which it is divided derived their family name from the creeks and estuaries of that neighbourhood.

The Chao Nam, who are found on the Siamese shores though truly nomadic, do not wander very far. Their movements are dictated by the seasonal weather conditions, and individuals are observed to return to certain favoured spots at more or less regular intervals. The whole of their very scanty property is carried in their small sailing-boats which also serve them for dwellings, a boat twenty feet long sufficing for a family of man and wife, half a dozen children, a cat, a dog or two, and perhaps a monkey. Occasionally boat-building or net repairing operations or exceptionally bad weather necessitate living ashore for a time, when a rough leaf-shelter harbours the community.

The investigations of Logan, Thomson, Skeat and others seem to point to the probability that the Chao Nam are of Môn-Annam stock. Mongoloid characteristics are, however, not prominent, in fact are frequently almost imperceptible. The skull is brachycephalic, the eyes sometimes slightly oblique and usually not well opened, there is a distinct nasal ridge, the jaw is not pronouncedly prognathous, the hair of the head is straight and quite black and a scanty moustache and beard are usually present in adult males. The physique of this tribe is good though the lower limbs are noticeably under developed, owing probably to countless generations of boat life. It is said that they are clumsy and feeble walkers. The average height is about the same as that of the Siamese. The skin is rough and dark and the whole tribe is peculiarly liable to many painful and unsightly skin diseases.

It was customary until recently to class the Chao Nam with the Semang, but it is now considered that there is no trace of any connection between them other than casual contact.

The religion of the Chao Nam consists of a vague form of Spirit Worship. They have no idea of a Supreme Being or God but believe in the continuance of existence after death and that the spirits of the dead haunt certain places and have power to molest the living.

The flying lizard, supposed to bring the soul to new-born infants, is held sacred, as are sharks and crocodiles. Malevolent spirits, such as the Spirit of Thunder and of Storms, are recognised and are propitiated with offerings of food. Any knowledge of witch-doctoring that the Chao Nam have has apparently been borrowed from neighbouring inhabitants of the Peninsula.

Births take place in the dwelling boat. One or two old women are usually present to assist. Half an hour after a birth the mother drinks a dose of a decoction of Mangrove leaves, bathes in the sea and immediately afterwards goes about her ordinary avocations with the child so fastened to her back that it can be slewed round when necessary and fed under her arm.

A Chao Nam marriage is sometimes celebrated by a feast but more usually consists of the male party simply taking the female to live in his boat without ceremonial observance of any kind. Polygamy is never practised. Divorce is by the wish of the husband. The forbidden degree of intermarriage extends to first cousins.

The dead are buried without ceremony, the neighbourhood of a new grave being avoided for a time from fear of the ghost of the departed.

The language of the Chao Nam is compounded of Malay, Jakun and Siamese, the first predominating.

The tribe is entirely illiterate, possessing no form of

writing of any kind. They have names for three numerals only, though individuals who have come much in contact with Siamese or Malay civilization, have sometimes mastered the science of arithmetic so far as to be able to count ten.

Like their Jakun relatives they are addicted to the making of quasi-musical noises but have no national instruments. The flute, or pipe of bamboo, and other primitive instruments they have borrowed from neighbours, and they have vague notions of singing and dancing which are put in practice on occasions such as the celebration of a big catch of fish or the launching of a new boat.

The dress of the man consists of a diminutive loin-cloth, formerly always of prepared bark but now usually of imported cotton cloth. A wisp of the same material is worn round the head.

The women sometimes possess complete Malay costumes of sarong and jacket but seldom wear them, their usual costume being a cotton cloth which covers them from below the waist to above the knee. They are not without instincts of coquetry, which show themselves in the adornment of their unwashed and swarthy nakedness with necklaces and bracelets of fish teeth, light coloured seeds or crabs' legs and in the twining of sea shells amongst their matted locks. Neither tattooing nor those scratchings of the face and body sometimes practised by certain tribes of the Peninsula are known to the Chao Nam.

Of weapons and implements they have few. Various jungle plants supply fish spears, nets and blow-pipe which, with the addition of a rough knife bartered or stolen from neighbouring Malays, constitute their whole apparatus for the provision of food and the protection of life. As planting is not practised, no agricultural implements are necessary.

Tobacco, clothing, rice and other luxuries are occasionally obtained by bartering Bêche-de-mer,

turtle eggs, resin, canes, eaglewood, etc. Their sails, cordage and other boat gear are all made of materials found in the littoral jungles.

Experiments which have occasionally been made in educating individuals of the tribe, give the impression that the Chao Nam are practically incapable of assimilating any degree of knowledge or civilization, in fact, that they can never make responsible citizens of the State. Their numbers, already small, are said to be decreasing.

Malays. The Malay population of Siam was reduced, by the cession of territory to Great Britain in 1909, from over one million to some 400,000. Of those who remain, the greater part inhabit Southern Siam, but about 50,000 are located at Chantabun, Ayuthia and Bangkok and along the eastern shores of the Gulf. These latter are the descendants of captives brought back from time to time by the military expeditions to the Malay Peninsula which were of frequent occurrence in the past.

The Malay of Southern Siam is of comparatively recent evolution. It is not more than 500 years since roving parties of Malays from Malacca first penetrated the rivers of the northern part of the Peninsula and, overcoming the resistance of the inhabitants, made settlements there. Their superior warlike qualities enabled them to spread their influence through the surrounding districts and, by circumcising the indigenous male population and extensively intermarrying with the female, to produce a large population of passable Malays in a surprisingly short space of time, the more so as the indigenous people, descended like themselves from the ancient Môn-Annam stock, strongly resembled them in most respects. Indeed, with the exception of language, costume and religion, there is little to distinguish the Malay of Southern Siam from the Siamese of that locality. Physically the two are exactly alike, both having complexions

of varying shades of brown, short stature and slight but well-knit frames, brachycephalous heads with prognathous jaws, oblique brown eyes, straight black hair, prominent cheek-bones and flat noses ; in fact, all the usual characteristics of the Further Indian Mongoloid type. In this respect the Malay of Southern Siam differs somewhat from the true Malay, in whom the Indian and other foreign blood which has contributed largely towards the evolution of his race, has to some extent modified the Mongol characteristics.

The language of the Pattani Malay consists of a dialect of Malay interlarded with words borrowed from Siamese ; a dialect so broad as to be almost unintelligible to the unaccustomed ear of a true Malay. The Setul and Puket Malays also use a large number of Siamese words, but their pronunciation, being less marred by dialectical clippings than is that of their East Coast cousins, is more comprehensible to the Malays of the South.

The Malays of Siam are all Mohammedans, but the spirit worship they practised, together possibly with a veneer of Buddhism, before their conversion, still maintains a strong hold upon them, more especially in the remoter districts, where the inhabitants are frankly animistic with the merest varnish of Islamism superimposed. The people are grouped into parishes, each of which has a *Surao*, or Praying House, and a staff of clergy, and the Mohammedan rites of circumcision, marriage and burial are universally practised ; but beyond these observances the lives of the people are ordered entirely with reference to the legions of supernatural beings which they believe to surround them and to exercise an influence, benign or baleful as the case may be, upon even the most trivial of their actions. There is some slight evidence to show that before the people were converted to Islam their religion may have included a debased form of Brahmanism. The conqueror when imposing Mohammedanism

upon them, failed to dispel the influence of the Brahman gods who, though classed by orthodox Moslems with Afrits and Jins, to follow whom should properly be death and damnation, still stand at the head of the spirit world and command the utmost respect of the people. In fact the Brahman gods with their hosts of attendant spirits occupy much the same position with regard to the Mohammedanism of the Malays as they do to the Buddhism of the Siamese.

The Malays of Siam are agriculturists and fishermen. They own some of the best rice-producing land in the Peninsula, and the seas which wash their shores teem with fish of many kinds. Their methods of farming and fishing differ from those of the Siamese only in the shape of some few of their implements and in their greater dread of interference with their pursuits by the unseen powers and, consequently, in their more elaborate propitiatory efforts.

The usual costume of the Siam Malay consists of three garments, or rather pieces of cloth. With the men these are a waist-cloth descending to the knees, a strip of cloth worn sometimes twisted into a belt and sometimes thrown over the shoulder, and a small kerchief around the head. In the case of the women the three cloths are amplified; the first descends from the waist to the ankles, the second is hitched round the body under the arms and over the bust and descends to a little below the hips, and the third is intended to cover not only the head but the shoulders and neck also. The men usually shave their heads, while the women wear their hair long and knotted on the top of the head. The race is non-hirsute and such scant hairs as appear on the chins of the men are usually plucked out. On festive occasions the men wear a checked skirt or *sarong* while the women use bright-coloured silk clothes and dress their hair with flowers. In spite of the precepts of Islam, the ladies contrive, by the disposal of their costume, to reveal the lines

of their sometimes shapely figure and, as often as not, to expose their arms and neck in a manner which would scarcely be tolerated farther south. Indeed, the restrictions imposed upon the female sex in other Mohammedan communities are here largely absent, the women moving about in public with freedom equal to that of the men except upon occasions of great ceremony, when ladies appear carefully swathed to the eyes and when they are rigorously segregated from the men, though an hour or so earlier they may have been disporting themselves at a public mixed bathing-place clad in next to nothing at all.

The loose jacket, baggy trousers and bright *sarong* which form the typical costume of the male Malays of the south are rarely seen among the Siam Malays, and then only on the persons of the more well-to-do.

Though Islamism is at its very feeblest amongst the Siam Malays, yet its prohibition of gambling and of the drinking of alcohol are very generally observed, at least by the unsophisticated people of the east coast districts, who are, in consequence, more easily controlled and more free from crime than the Siamese. The Malays of the west, however, in whose veins runs a considerable admixture of Tamil blood, though more careful in the outward observances of their religion, are great sinners in private and, especially in the towns, are perhaps the most depraved communities of Mohammedan Malays in existence. It is to be noted that the tales of reckless Malay courage, combined with treacherous ferocity, which form, or used to form, a considerable part of the literary nourishment of English youth, find singularly little corroboration among the Malays of Siam who, though they may occasionally settle a question of dishonour by recourse to arms, in nine cases out of ten prefer to wrangle it out at length in a Court of Law.

Khmer. The Khmer, or Kambodians, inhabiting Siam are located chiefly in the Circles of Ubon, Korat

and Prachin, bordering on Kambodia proper, but several small communities of them are to be found in other neighbourhoods, especially in the west of Central Siam, where, as prisoners taken in ancient wars, their ancestors were planted out in settlements and given lands subject to the rendering of military and other services to their conqueror.

In costume, customs and religion the descendants of the Kambodian prisoners of war are now scarcely to be distinguished from the Siamese amongst whom they live, except perhaps by their pronunciation of the Siamese language, the intricate inflexions of which do not quite come naturally to them though they have used it for several generations.

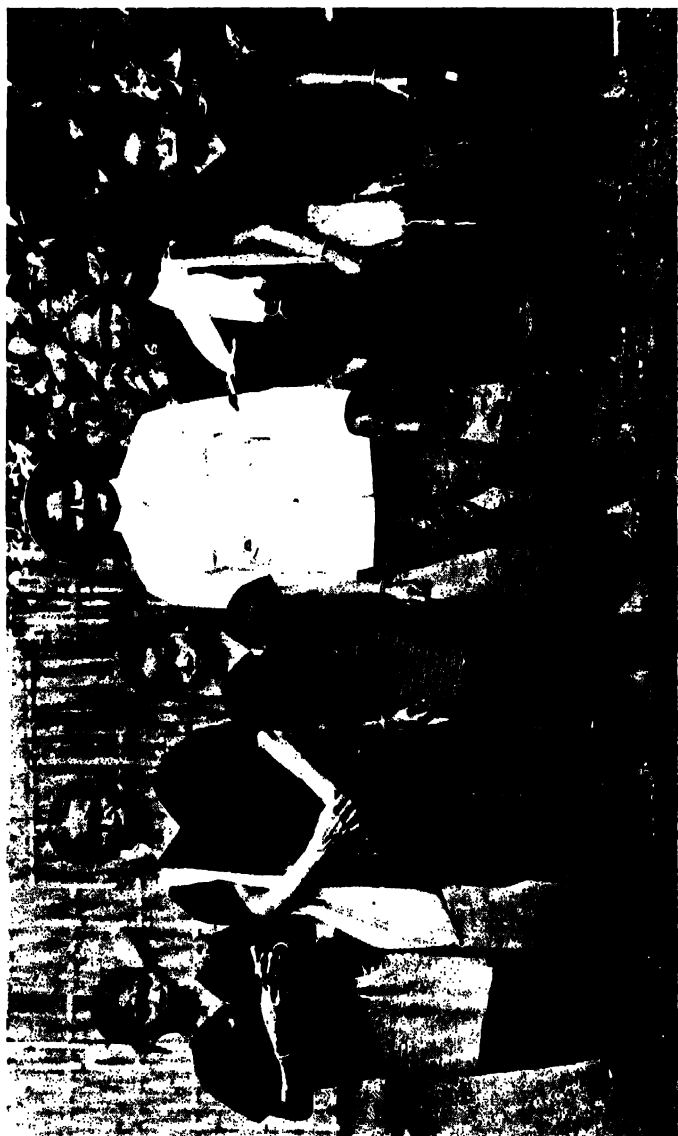
The Circles of Ubon and Korat include what were once outlying districts of Kambodia proper. The present frontier follows the crest of the Pnom Dang Rek range, but the numerous remains of Khmer shrines, causeways, reservoirs and walled towns, scattered all over the country to the north or Siamese side of those mountains show that in times gone by this part supported a large Khmer population. That population is now represented by some four hundred thousand persons distributed in villages along the southern edge of the Korat plateau. Except for the fact that they speak Kambodian, using Siamese as a second language, there is little to distinguish them from the Siamese, their costume, religion and most of their customs and ceremonies being practically identical with those of their neighbours. Writers on Kambodia, conversant with such of the ancient history of the country as is known, have expatiated, sometimes largely, on the traces of Indian, "Aryan" (?) or "Caucassic" origin apparent in the physique of the Kambodian. It is quite possible that in the capital of Kambodia, traces of foreign blood may be visible now and again as at Rangoon, Bangkok or other centres of Further India which have been the resort of peripatetic Indians from

time immemorial, but of such traces in the Khmer of the Pnom Dang, Rek, it is almost needless to say, there are none.

The modern Khmer are the direct descendants of the race which, accepting the Brahmanism and its attendant culture brought to it from the shores of Southern India in the remote past, rose through a period of development to a high level of civilization and relapsed to a condition not unlike the primitive state from which it had started, leaving as almost the sole evidence of its career the ruins of temples and other buildings erected at the time of its greatness. The modern Khmer of Siam live amongst the ponderous remains of the works of their ancestors and have no knowledge, and scarcely even a tradition, of their significance or how they came to be there. Except at Kukan where linger a few members of the family of the local Chief, now deposed, they are practically all peasant cultivators of tiny holdings cleared in the surrounding jungles or dotted about the great open spaces whence their remote forebears, with a knowledge of irrigation and agriculture now totally lost, obtained the food supply of a large population.

Môn. The modern Môn race, or Talaing as the Burmese call it, is represented in Siam by several communities inhabiting the banks of the Menam Chao Phaya river above and below the capital, and scattered through the provinces of Rajburi and Nakon Chaisi, and by a considerable number of people living in Bangkok itself. These are descendants of prisoners brought from the Tenasserim province of Burma during the wars between that country and Siam, or of refugees who have from time to time fled from Pegu and other parts of Southern Burma to escape the persecution which the Talaings formerly suffered at the hands of the Burmese. The captives and refugees on arriving in Siam were given lands to cultivate, in return for which they were placed under the obligation to render





military service, as was the case with Malays, Cambodian and other foreigners in like circumstances. Under these conditions they settled themselves in villages contiguous to their lands, where they were generally governed by their own headmen, permitted to follow their own form of Buddhist ritual, differing slightly from that of the Siamese, and to use their own language. Their descendants occupy the same lands to-day. The communities, in spite of the liability to the detested military service and of the somewhat degraded social position which that liability formerly entailed, have increased in size and prosperity, many individuals have risen to high office in the service of the State, and the Môn to-day are reckoned among the more prosperous people in Siam. One of the most popular and successful of Siamese Ministers at the Court of St. James's in the nineteenth century was a scion of this race.

In the ordinary course of events the old military laws have become unsuitable to the needs of the country and have therefore been replaced by others which make service in the Army or Navy compulsory for all Siamese subjects. Thus one of the main influences for separation between the Môn and Siamese has been removed and it is probable that a few years will see the complete absorption of the former by the latter race. As a Talaing in Burma, so a Môn in Siam can often be distinguished by his superior size and height ; otherwise his physical appearance is almost identical with that of the Siamese. The Môn of both sexes wear the Siamese panung or tucked-up skirt but the women wear it rather more voluminous than do the Siamese. The Môn ladies also affect a tight-fitting white jacket on some occasions, and wear their hair twisted into a characteristic chignon at the back of the head.

Their houses differ slightly in construction from those of the Siamese, and have their gable-ends pointing east and west, a matter about which the Siamese are

not particular. The Môn language is still spoken in the villages and is taught in a few of the temple schools. The Môn, however, all speak Siamese and that without the foreign pronunciation which distinguishes the Kambodians.

Yuan, or Annamese, are found in Siam to the number of about 6,000, and inhabit principally the south-eastern Circle of Chantabun, though some live in the neighbourhood of Bangkok. The former are the descendants of certain converts to Roman Catholicism who fled from Annam in the seventeenth and eighteenth centuries to escape persecution in their own country, while the ancestors of the latter were mostly prisoners of war taken in the campaigns against the Annamese at the time when Kambodia was a bone of contention between Siam and Annam. The Annamese of Chantabun continue to practise the religion for which their forefathers suffered exile, and those of Bangkok are also nearly all of the same faith. It seems that in former days the Roman Catholic Missionaries in Siam found ready converts in the Annamese prisoners of war, and that in addition to the rudiments of Christianity, they taught them also the elements of military discipline, thereby changing them from a miserable crowd of slaves, reluctantly bearing arms in the service of their conquerors, into an orderly and useful body of troops; wherefore the King, much pleased with this arrangement, ordered that all prisoners subsequently taken in the Annamese wars should be handed over to the Missionaries for conversion and for inclusion in the ranks of the Christian soldiers. King Mongkut, early in his reign, presented no less than 3,000 such persons in one batch to the Roman Catholic Mission. The Annamese, by reason perhaps of their adopted religion, do not show any tendency to become absorbed by the Siamese, though they strongly resemble them in feature and physique. They still retain their peculiar costume of loose black trousers and coat,

common to both sexes but with the coat extended into a sort of gabardine in the case of the women, and allow their hair to grow to its full length. They also continue to use their own language; they are all able to speak Siamese more or less correctly. Some few have risen to high military rank, but outside the Army and Navy they are seldom found among the upper classes.

The Lawa, or L'wa, are hill tribes inhabiting the Border ranges to the west and south-west of Northern Siam. The appearance, language, and traditions of this people clearly indicate that, though now surrounded by Lao, Siamese, and Shans, and much modified by contact with these races, they really belong to the Môn-Annam family. They themselves believe that at some very remote period their ancestors occupied the whole valleys and plains of Central Siam, and it seems probable that such was in fact the case.

Their gradual reduction to a mere remnant of a race must have taken place during very early times, for they have nothing to connect them directly with the more or less civilized Khmer who occupied the land at the time of the Lao-Tai intrusions. They were, however, distant cousins of those same Khmer, whose occupation of the interior of Siam constituted a reflux of what may be called the crest of the wave. Before that reflux the Lawa scattered and retired to the hills, in the fastnesses of which they were left untouched by the march of subsequent events, and, except for the admixture of a rude form of Buddhism with their spirit worship and a recent introduction into their language of a few Shan words, they have seen the Khmer, and, later, the Lao Tai civilizations, rise in turn and flourish around them, leaving them in a condition but little removed from that of their rude forefathers.

The Lawa is a little shorter and a little darker, and has slightly less pronouncedly Mongolian features, than the Siamese. He cuts his hair short in Siamese

fashion, but wears the baggy trousers and turban of the Shan.

The traveller in Further India, following the jungle-tracks and bridle-paths in any part of that maze of forest-clad mountains and valleys which lies roughly between 98° and 104° E. long. and 17° and 25° N. lat., and which England, France, China, and Siam now divide between them, may meet at any corner, or may see crossing his route by a by-path, a line of little blue-clad figures, plodding in single file, bending beneath the weight of tall baskets suspended upon the back by a band round the forehead, swinging their arms before them and drawing their breath with a peculiar whistling sound. These will be the women-folk of one or other of the innumerable tribes which occupy the crests and spurs of the ranges in this vast tract; carrying produce home from the fields or to the markets held periodically at the Shan or Lao villages of the valleys. Although belonging to so many different tribes, some of which are but remotely interconnected in race, and others not at all, the resemblance in the general appearance of these women is such that the casual observer might almost mistake a group of Kachin from near Bhamo for Kaché about Muang Nan. The ground-work of their costume is almost always dark blue cotton cloth, made into a kilt or skirt, a jacket more or less voluminous, a cloth for the head and gaiters for the legs. It is in the stripes and ornaments on the blue ground, in the number and nature of the cane or wire bands worn round the waist, neck or knees, in the method of fastening the head-cloth and of wearing the hair, that the particular tribe or clan to which the women belong can be distinguished. The women of the Lawa affect this blue dress, relieved as a rule only by a few thin white lateral stripes on the skirt. They also wear a jacket in the form of an abbreviated gabardine and usually dispense with any headcloth. They wear their hair

long and gathered into a rough chignon at the back of the head.

The Lawa cultivates hill rice, is of a timid and peace-loving disposition, and is slowly decreasing in numbers. A jumble of witchcraft and spirit-worship, made more complicated by the presence of a few Buddhist mendicant monks, serves him for religion. A single wife contents him as long as he is in his natural condition of poverty, but should he by chance amass wealth, he at once becomes a polygamist of pronounced type. Going to market forms the chief excitement of his life, the government is represented to him by his own headman, and the outside world by occasional visits of Siamese forest officers or tax-gatherers. The Lawa houses are large and strangely constructed, built of bamboo chiefly, with thatch roofs, and all inconceivably dirty. The art of smelting iron is understood by the tribe and is practised largely but in most primitive manner, ploughshares, knives and other articles being made from the metal and sold in the neighbouring markets.

Kaché. The Kamuk, Kamet, Lamet, Ka Bit, Ka Hok and Pai, are closely related hill-tribes located partly in the mountains of Muang Nan in the east of Northern Siam but chiefly in the neighbouring French dependencies of Luang Prabang and Chieng Kwang. Separated by a wide tract of country from the hills of the Lawa, they nevertheless strongly resemble the latter and they seem to bear a family likeness to the Wa who inhabit between the rivers Salwin and Mekông some 400 miles to the north, and also to the Palaung or Rumai of the mountains of Tawng Peng, or Taung Baing, 350 miles away to the north-west. Like the last named, the Kaché are properly classed as of the Môn-Annam family, and this despite the quaint Lao tale which traces the origin of themselves and the Kaché to a brown man and a black man, evolved from two pumpkins somewhere in the neigh-

bourhood of Luang Prabang, and who, apparently, propagated the two races without that female assistance which is usually considered necessary to the achievement of a family.

The people of these tribes, which are known generally to the Siamese as Ka or Kaché, meaning originally "slave," vary considerably in the amount of civilization to which they have attained, some of them, from long and intimate intercourse with the Lao and Siamese, having adopted Buddhism together with many of the manners and customs of their neighbours, while others, and these constitute the majority, continue in the rude and benighted condition of their forefathers. In the past they were invariably regarded by the Lao chiefs in whose territory they lived, as beings of an order slightly below the human and as the mere chattels of the overlord, to be bought or sold, put to any kind of forced labour or exterminated, according to his pleasure. For a Lao to kill a Kaché might be considered as a mischievous destruction of the property of a chief but in no sense amounted to the crime of murder. The Kaché, largely outnumbering the Lao, frequently rebelled against the treatment which they received, but were usually reduced to order without much trouble and were always afterwards made bitterly to expiate such lapses from docility. These things, however, are of the past. The Kaché are now as free as any one else in Siam and many of the Kamuk clan have saved money and acquired property, chiefly, by their work in the teak forests where they are largely employed as mahouts and lumber-men. The loss of Luang Prahang and of the provinces east of the Mehkông has greatly reduced the Kaché population of Siam, but the timber industry draws large numbers westwards from the territories ceded to France, and settlements of the better class of Kaché are increasing in the province of Nan.

The Kaché are considerably shorter and darker

than the Lao or Siamese and, like the Lawa, have features not demonstratively Mongolian in type. Their diminutive size and dark colour has led to their being classed as Negritos, but careful comparison of their appearance and customs with those of true Negritos, such as the Semang, at once contradicts this theory. Their language is strikingly similar to that of the Lawa, the general construction of the two being almost identical. There is no written language, but a legend runs that the tribes once possessed an alphabet. This, however, was known to one man only and unfortunately was lost owing to his sudden death in the course of a rather heated discussion. The wisest and most intelligent men of the tribes devoured their erudite clansman's body, in the hope of recovering some part of his knowledge, but these efforts in the cause of science were without caligraphic result and the Kaché remains illiterate.

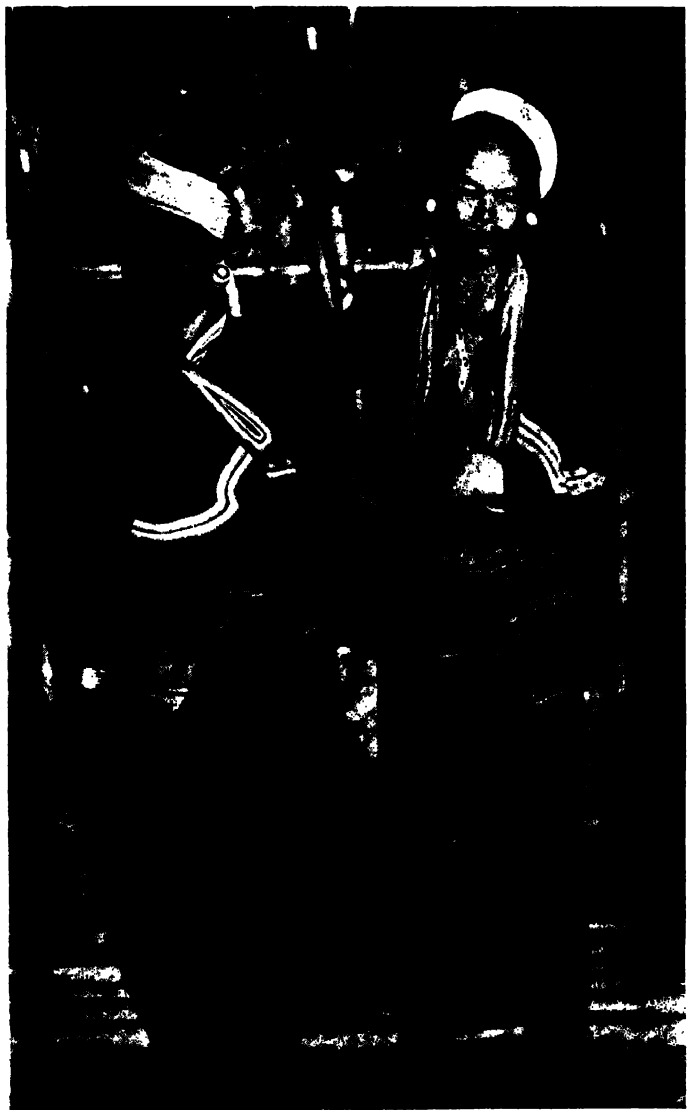
The costume of the male Kaché varies from the diminutive loin-cloth of homespun cotton, practically invisible from behind, with which he starts his adult life, to the complete outfit of baggy trousers, short coat, turban and sash, which he assumes, in more or less correct copy of the Shan dress, as soon as he begins to have an income to spend and a position to support. Should he never aspire to more than the ordinary life of the wilder hilltop villages, the loin-cloth may continue to suffice, supplemented for village festivals or on chilly evenings by a short sleeveless waistcoat, the donning of which, far from covering his nakedness, throws into sharper relief that part of him which his untutored mind leaves bare. In the more civilised villages, however, trousers are now *de rigueur*.

The Kaché women wear the traditional blue skirt of the hill people, but many of them prolong it almost to the ankles. Broad stripes follow the hem and ornament the upper part. Otherwise the garment is usually plain. The females of some of the more backward

clans, however, such as the Ka Hok, still use a knee-long, kilt-like skirt and sometimes weave many bands of red and white into it. The short blue jacket which they all wear at times has coloured bands, usually red or white, round the neck and waist. Bracelets, hairpins and earrings of silver are worn, and the hair is done in a "bob" on the top of the head and covered by a head-cloth. In the privacy of the home much, if not all, of this costume is commonly discarded, apparently to facilitate the performance of household duties. All the Kaché, even the more enlightened Kamuk, consider cleanliness a mere fad and do not practise it.

The religion of the Kaché, except those Kamuk who have adopted Buddhism, expresses itself in the propitiation, by sacrifice, of the evil spirits by which they believe themselves to be surrounded and jealously watched in all their undertakings. The ranks of these spooks being constantly recruited from amongst the ghosts of departed tribesmen, propitiation is an increasingly arduous business, the more so as misfortune of any kind is invariably attributed to the malevolence of some neglected spirit. Most villages have a meeting-house in which sacrifices are offered, and here fowls, pigs and cattle are killed, cooked, and, after being offered to the spirits, eaten with gusto by the congregation, for the good of unfortunate individuals for whom prayers are desired or to secure the general welfare of the community. The identity of any spirit which it is desired to appease is usually discoverable, by the initiated, from a careful scrutiny of the fibres of a split stick.

The Kaché villages occupy the highest crests of the mountain ranges. The houses are comparatively solid structures of timber and bamboo, long and low, with the floor raised two or three feet above the ground and the whole thatched with grass. Marriage is in theory a matter of barter, but in practice the principals know each other intimately and have usually come



KACHÉ (KAMET) WOMEN OF PANG HAI.



MEAO MEN AND WOMEN. PAYAP CIRCLE.

to a mutual understanding, based upon practical experiment, before the arrangement of the marriage is published. As in other tribes practising ante-nuptial free love, infidelity after marriage is almost unknown. The Kaché have little or no knowledge of medicine ; the properties of a few herbs are known and these are used for certain maladies, but the usual treatment for any sort of disease is the exorcising of the evil spirits causing sickness, by sacrifice and by blowing, whistling, singing, dancing and other incantations, variations of which are common throughout Further India. The dead are always buried, usually in the jungle at the edge of the village clearings. Burial ceremonies are of the most primitive, cleansing the body of evil spirits and eating and drinking heavily in its honour being the principal observances. All the Kaché clans practise agriculture in temporary clearings made on the forest-clad mountain slopes. Here they grow rice, maize, millet, a little tobacco and other produce, but chiefly rice, planting a clearing once or sometimes twice and then making another. They are skilful fishermen and trappers of game.

The Chong are a small and scattered tribe inhabiting the mountain range north of the Chantabun province. They are in an exceedingly primitive condition, have no settled habitations and subsist chiefly by the collecting of jungle produce such as resin, beeswax, wood-oil and rattan, which they barter with the Siamese for food-stuffs. Their customs, beliefs and language have much in common with those of the Kaché, and though some writers have sought to class them with the Negritos, they are more probably of Môn-Annam stock.

TIBETO BURMAN.

Meao. The first impression on encountering the Meao is that here is something different from the usual hillman of Further India. Instead of the almost naked

men and the generally dirty and sparsely-clad women, to whose frowsy appearance and unwashed Mongoloid faces the traveller in this part of the world has grown accustomed, there appears a neat and sturdy people, in whose features the Mongolian type is slightly modified, of a bright, cleanly and intelligent appearance, and of industrious habits. They are divided into eleven, some say twelve, clans the majority of which are not, however, represented in Siam, and from long contact have acquired many points of resemblance with the Chinese of Yunnan, the most remarkable of which are their language and the abbreviated pigtailed and the costume of the men. The dress of the women varies greatly in the different clans, and borrows nothing from the Chinese. The men wear loose trousers and short coat, a waist-band, sometimes with embroidered tassels, and a large blue turban occasionally replaced by a Chinese cap fitting close to the head. All carry an embroidered bag which serves as a capacious pocket, and many go armed with a dah, or sword, and a cross-bow. The women of the clans found in Siam wear a pleated skirt descending below the knees, and a cross-over coat embroidered at the edges, with sleeves down to the wrist. They also wear a many-coloured turban and sometimes swathe their legs in strips of cloth as a protection against thorns. The women wear their hair in a top-knot which, however, is usually concealed by the turban. McCarthy records that in one of the clans the coiffure of the ladies is an elaborate affair kept in position with beeswax and so constructed as to last for several years without remaking. They have very little jewellery but both sexes often wear a silver torque, to which a pendant inscribed with Chinese characters is sometimes attached.

With the advance of the French across the Mehkông Siam has lost the greater part of her Meao subjects, but a certain number of villages are to be found in the province of Nan and in other parts of Northern Siam,

and as the long-prevailing southward and westward movement of the various clans of this people still continues, more communities are continually being established within the present Siamese border.

The Meao live in strongly-built houses with timber or mud walls and stone floors, generally perched on or near the crest of the highest available mountains. They use a rough bedstead, stools and tables, all of which are conspicuously absent from the houses of the Kaché. Their agriculture is carried on in forest clearings on the sides of the mountains on which they have their settlements, and they grow rice, maize, tobacco, hemp, vegetables of sorts and opium. They keep cattle, goats and a few ponies. The women are much occupied with weaving and embroidery, the results of their labour being often of artistic value. The Meao are monogamists and their marriages, which are usually preceded by a period of irregular co-habitation, are accompanied by elaborate ceremonies. Their religion is the usual spirit-worship, observed by means of sacrifice, by heavy eating and by the copious drinking of rough, strong spirit distilled from rice. They practise burial of the dead, and their custom of placing a white cock beside the corpse to do battle with the great lizard supposed to bar the passage of the soul to paradise may possibly denote some remote connection with the Chinbok tribes far away to the west, on the other side of Burma. The Meao say they once had a written character but have lost it. They now use the Chinese, in which a small proportion of their men are proficient. They also use the Chinese calendar. There appears no reason to warrant affiliation of the Meao with the races of Môn-Annam stock, while language, customs and, to some extent, appearance, seem to hint at connection with the Tibeto-Burman races. They are therefore now included among the latter, though subsequent investigation may possibly prove such classification quite wrong.

The Muhsö are another widely distributed tribe supposed to be of Tibeto-Burman stock. They call themselves Lahu or Lahuna, Muhsö being apparently a corruption of one of the Chinese names for the tribe. Their traditions indicate an ancient Muhsö kingdom situated south of Talifu in Yunnan, and not very far from the borders of Tibet, which latter country was probably the cradle of their race. Migrations to the southward caused by internal strife, by aggression of foreign tribes or by excess of population, brought into existence a series of Muhsö communities scattered over the north of Further India and bound together in a confederacy which in time grew to such power as to arouse the jealousy of China. A long struggle with the latter Power was the result, and this ended, in the earlier part of the nineteenth century, in the disruption of the confederacy, since which time the Muhsö have continually journeyed still further southwards to find an escape from their conquerors and persistent oppressors. This movement has brought them in considerable numbers into Siam and especially into the district of Muang Fang in the far north corner of the Chieng Mai, or Payap Circle, where, indeed, there has for many years been established a Muhsö Chieftain of wide-extending influence.

The features of the Muhsö are of a distinct Mongolian type and in stature they are sturdy and well set up. The costume of the men is practically that of the Yunnanese Chinese, that is, it consists of baggy trousers, loose coat and waist-cloth, all of dark blue or black, and a turban. The women wear a skirt hitched round the waist and falling well below the knees, of a dark blue ground with lateral stripes of colour woven into it. With full dress an underskirt is often worn. A short dark blue or black jacket with long sleeves and without embroidery except at the neck, covers the upper part of the body more or less, but this, in some clans, is replaced by a coat with long

tails fore and aft. The front of the jacket is fastened by one or two large silver buttons, or discs, which are regarded as heirlooms and held very precious. A dark blue head-cloth is worn, and arranged in a striking manner, the broad flaps being so disposed as to give all the impression of a large, high hat. Both men and women usually carry the embroidered haversack common to all hill-tribes of Further India, in which are kept the tobacco, pipe and matches (or flint); looking-glass, comb, razor and hair-tweezers; chewing outfit of red lime, betel and cutch; a feed or two of cold boiled rice; and other things necessary to the existence of every respectable hillman. Of jewellery the men wear practically none, but no woman would care to be seen abroad without silver bracelets at her wrists, large silver rings in her ears and at least one heavy silver torque round her neck. Indeed, without these silver ornaments, that are all made after a fixed general model, she would not be considered at all safe from the machinations of possible enemies or the attacks of evilly-disposed spirits. The *ensemble* of the costume has a sombre but not altogether unpleasing effect.

The weapons of the Muhsö are usually sword and crossbow. The latter discharges an arrow made of bamboo, sometimes tipped with poison, capable of bringing down tiger, bear and other big game at as much as a hundred yards distance.

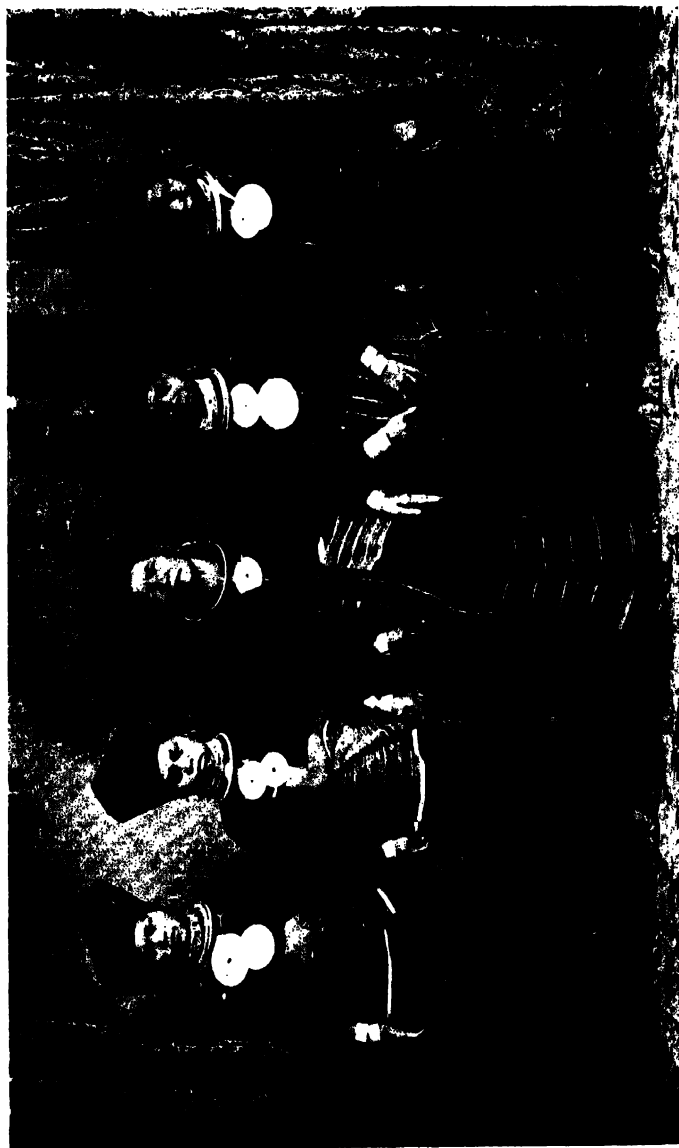
The Muhsö cultivate the mountain ridges and slopes round about their villages and are skilful husbandmen, obtaining good crops of rice, maize, millet, tobacco and opium, all for home consumption, though it has been whispered that the last named product at times finds its way past the contraband stations into competition with the Government article. Their houses are well built of the usual timber and bamboo. Their religion is in the main animistic but is imbued to a certain small extent with Buddhism. Whilst observing most of

the ceremonies of ordinary animistic beliefs, they meet together for prayer or invocation, not exactly worship, in a special building set apart for the purpose in each village, on the eighth day of the new moon, at full moon, and on the eighth and last days of the waning. They practise circumcision. Their animism comes out especially in a religious festival which they hold once every year and at which sacrifices of fowls, pigs and cattle are offered, with the inevitable accompaniment of strong liquor. Sir George Scott, who has observed the Muhsö in many regions of Further India, says that in their older northern seats they are Buddhists of a sort, but those who have wandered far to the southward have reverted to animism. This probably explains the mixed religious customs of the Muhsö of Siam. They bury their dead in wooden coffins with a great deal of ceremony of the sort practised by most spirit worshippers.

In the bag or haversack of the male Muhsö there will usually be found, in addition to the articles enumerated above, a musical instrument of the mouth-organ kind, made of reeds fixed into a small dried gourd with a peculiar elongated end. The instrument is blown into through the thin end of the gourd and notes are made by manipulating air-holes in the reeds with the fingers. A low, sweet sound is produced and the little airs of a weird cadence which the performer plays while walking to market or watching the crops are very pleasing even to unaccustomed ears. This instrument, called *ken*, is used to accompany the queer dancing to which the Muhsö are greatly addicted. The *ken* in various forms is common to many of the people of Further India. In the hill-tracts to the far north it is formed of a single reed eight inches long, thrust into a tiny gourd and producing only three or four notes, while among the Lao in Siam it has reached its full development as a powerful instrument of considerable compass, with fourteen reeds varying from one



MUHSO MEN. MUANG FANG.



MUTHU WOMEN. MUANG FANG.

and a half to twelve feet in length, fixed in a wooden mouthpiece.

The Muhsö has no written character, but a few of the men can read Chinese, usually very badly.

The Kuwi or Kwi or Lahu Hsi are closely related to the Mushö, the two tribes speaking different dialects of the same language and understanding each other fairly well. Except that the Kuwi cremate their dead instead of burying them as do the Muhsö, their customs are almost identical.

The Kaw, identical with the tribe known as Akha elsewhere, are not found in large numbers in Siam, though they are fairly numerous in the districts north and east of Luang Prabang which have passed, within the last few years, from Siam to France. In the mountains of the Muang Fang, Chieng Sen and Chieng Kawng districts of the Payap Circle, they have a few widely-scattered villages, but there are probably not more than 2,000 of them in the whole country. They have been classed with the tribes of Tibeto-Burman stock. Warrington Smyth remarks their close resemblance to the Muhsö. Sir George Scott, however, while placing the Muhsö comparatively close to the Burmese, finds no ground for including the Kaw in that group other than those of convenience and of politeness to Sir G. Grierson. Except by their superior size and ugliness the Kaw men are scarcely distinguishable in general appearance from the Muhsö or from the most highly civilized of the Kaché tribesmen. Their features, however, are coarser, the chin projecting remarkably, and, like the Méao, they wear a small pigtail hidden under their turban. The women of the tribe are unmistakable. Their head-dress is peculiar. It resembles a small crinoline or basket of bamboo hoops covered with cloth. The affair is heavily encrusted with pieces of silver, coins, shells and bead-like seeds and is worn covering the whole of the head and descending so low on the forehead as almost to

conceal the eyebrows. The remainder of the costume of the female Kaw consists of a jacket stopping an inch or two above the waist and provided with short sleeves, of a skirt covering the body from somewhere below the waist to half-way down the thighs, and a pair of cloth gaiters enclosing the calves of the legs; the whole is much embroidered.

The Kaw is a spirit worshipper, the spirits most considered being those of ancestors, supposed to return occasionally from some vague abode of the departed, situated somewhere in the west, and to frequent their former haunts, when, if not properly propitiated, they inflict all sorts of ill upon their posterity. Each Kaw house has a ghost's entrance, never to be used by mortal man and only on special occasions by mortal woman. Much sacrifice, with heavy eating and with drinking to extreme intoxication, accompanies all religious ceremonies. The dead are buried in coffins made from hollowed-out logs. The Kaw are free lovers before marriage. Some of the clans are monogamists, while in others the men have as many wives as they can support. The approaches to their villages are usually guarded by an archway of large bamboos which, it is supposed, prevents the entrance of specially malignant spirits.

Lishaw. The Lishaw, a scattered tribe found in south-western Yunnan, in the Kachin country of Burma and in most of the Shan States, are represented in Siam by some two or three hundred persons only. They are apparently related to the Muhsö, but in habits and customs are almost indistinguishable from the Yunnanese Chinese of the more primitive sort. They live in houses with mud floors, both sexes wear loose blue coats and trousers and large blue turbans, and they nearly all speak Chinese in addition to their own language which has much in common with that of the Muhsö. They are clever agriculturists and practise also the blacksmith's trade and the silversmith's art.



KAW WOMAN.



SEN KWAN YAO MEN. DOI KONG KAO.

The Yao, or Yao Yin, are recent arrivals in Siam, whither they have apparently been driven from the mountains further north and from the east of the Mehkông. Off-shoots from their numerous clans have settled in the hills round Chieng Sen, Chieng Kawng, and in the province of Nan, where they have felled great tracts of jungle for the cultivation of rice, opium, cotton, and other produce. It is difficult to place the Yao, but as there are indications of relationship between them and the Meao they may be considered, until more is known of them, as of Tibeto-Burman stock. Like so many other tribes of the neighbourhood, the Yao have adopted many of the ways of the Yunnanese Chinese, whom they much resemble in the style of their houses, the dress of their men folk and their methods of agriculture. The costume of the women varies in the different clans, chiefly in the matter of head-dress, that of the Ting Pan Yao, the senior clan of the tribe, being the most striking. The coiffure consists of a square pad with a hole in the middle, supported above the head by stiff bands attached to the corners and to another band fitting close round the head. The hair is passed through the hole and is gummed down with resin on the top of the pad, a cloth of varying colour and with tassels depending from the corners being spread over all. This edifice cannot, of course, be removed without a lengthy operation and is therefore retained, when once made up, for many weeks at a time. The Lanten Yao, of whom there are now many in Siam, provide their women with a practicable hat, much like the sun-hat worn by the Siamese peasants. The rest of the Yao female costume consists of a long sleeved coat or gabardine, descending almost to the ankles and slit up the sides to reveal an embroidered petticoat which covers the body from the waist to below the knees.

All the Yao clans are imbued to a certain extent with Chinese culture, which gives them many advan-

tages over other hill-tribes. Many of the men read a little Chinese, and all, even those who are quite illiterate, pay the greatest reverence to books, as books and apart altogether from their contents; in fact, no Yao house is considered completely furnished without at least one book conspicuously displayed hanging on the wall.

The houses are built of split logs, with earth floors. The interiors are dark and begrimed with the smoke which constantly arises from the open baked-earth fireplaces, of which there are usually several in each house. The Yao grow rice, tobacco, cotton, maize and opium, and keep cattle, a few goats and innumerable pigs and fowls. Their religion is plain spirit worship, various propitiating services being held at the time of sowing and reaping, and during sickness. A ceremony of importance is the house-warming. The spirits which, if left undisturbed, would infest the house and bring all sorts of ill-luck, are invited to dine upon an altar-like structure erected in the middle of the new house, and (when supposed to be seated and at work upon the victuals) are carried out, food, altar and all, by the householder and his friends and deposited with much shouting and firing of guns at a safe distance in the jungle. It is curious to note how, many hundreds of miles away, a similar ruse to evict malignant spirits is in frequent practice amongst the Malays between whom and the Yao there has never, so far as is known, been even the remotest connection. Yao betrothals and marriages are matters of some formality. Offerings presented by the principals to each other in the presence of relations, a comparison of horoscopes and the payment of a dowry by the bridegroom, precede betrothal, some days of feasting follow it, and after an interval the bride is formally surrendered at the equally formal entreaty of the bridegroom, and further feasting at the house of the latter concludes the marriage ceremony. All the clans are



YAO WOMAN, FULL HEAD-DRESS.



YAO MAN AND WOMAN. DOI SAWA.

monogamous. The Ting Pan Yao burn their dead and bury the ashes. The Lanten and other clans simply bury. Pigs are sacrificed at funerals.

•

LAO-TAI.

Siamese. It has already been shown how the Siamese, or Thai, are a people of peculiarly mixed origin, and how they are at the present moment undergoing still further gradual modification in consequence of the frequent intermarrying of foreigners of many races, but chiefly Chinese, with their women, the children of which unions are rapidly merged in the preponderating race. In spite of this, however, the Siamese are a highly-distinctive people, and it is astonishing to note how rapidly foreign elements introduced from many widely separated parts of the world tone down and assume the general attributes characteristic of the nation, which the records of ancient writers show to have been fairly constant for many centuries.

“Comme l'aisance se trouve dans le bon marché des choses nécessaires à la vie, et comme les bonnes mœurs se causent plus facilement dans une aisance modérée que dans une pauvreté accompagnée de trop de travail ou dans une oisiveté trop abondante, on peut assurer que les Siamois sont de bons gens.” So wrote De La Loubère some 200 years ago, and the dictum, as regards both their general character and the causes which have contributed to its formation, is largely applicable to the Siamese of to-day. • •

The character of the average Siamese is marked by a general friendly but careless politeness, tintured considerably with subserviency towards superiors and with arrogance towards inferiors. His manners, which are naturally good, are developed by the habit of respect towards his parents, his teachers and the members of the priesthood, which he is taught to adopt at an early age. Amongst the upper classes it is

• 3

common to meet with a quiet dignity and serene politeness rarely excelled in the most refined countries of the world, while the manners of the peasantry surpass those of the industrial and agricultural classes of Europe, as is commonly the case with nations of the Far East. Towards Europeans the behaviour of the Siamese often leaves something to be desired, which is mainly due to the fact that every Siamese considers himself, by virtue of his nationality and quite apart from every other consideration, vastly the superior of any foreigner. The sentiment which prompts the heaving of half-bricks at the alien does not belong peculiarly to any one nation. In the Siamese it is as strongly developed as amongst most other people, and it is to the credit of their manners that the European who dwells with them experiences rather less of its unpleasant effect than does the foreign visitor in most European countries. It may also be noted that the European in Siam sometimes exhibits a contempt for his hosts which is scarcely calculated to encourage the exercise of politeness.

The Siamese is naturally submissive to those whom he recognizes as his superiors but in his general dealings with the world displays considerable independence and self-reliance. He is light-hearted, open and frank, kindly and hospitable and, in spite of occasional lapses into cruelty and apathetic indifference to the sufferings of others, generally humane. He is of a peace-loving disposition and, considering the facilities which he enjoys, little given to the commission of violent crimes.

The unenviable reputation which the lower classes have acquired as thieves is not supported by facts, comparisons between the statistics of Siam and other eastern countries being in this respect not altogether unfavourable to the former, more especially since the country has been supplied with more or less organized machinery for the suppression of crime.

Though an able and intelligent cultivator of the soil,

though exemplary as a schoolboy and industrious as an office clerk, the Siamese has been almost unanimously condemned by foreign observers as of an incorrigible laziness. The visitor to Siam rarely penetrates beyond the capital, and there he at once notices that the manual labourers, the rickshaw pullers, road-menders, rice-mill hands, carpenters, boot-makers, builders, etc., as well as most of the shopkeepers, are nearly all Chinese. Hence he jumps to the conclusion that the diligent Celestial is in a fair way to driving the Siamese out of existence in his own country. Such is, however, by no means the case, the native never having attempted competition with the Chinaman in the labour-markets of the capital. The Siamese is by nature a rustic ; when he lives in Bangkok he does so because he has been brought there, either he or his forebears, for the Royal service or as a more or less indefinitely attached member of the household of one or other of the nobility. There he has been kept in the idleness of easy menial service and there he has watched the various industries of the capital created and developed by the Chinese and to a great extent for the Chinese. It has never entered his head that he, a fed retainer, should enter into competition with the alien coolies who flock to the capital from China for the purpose of finding work. It says something for the race that the descendants of these Siamese retainers and swashbucklers make as good citizens of the capital as they do. The gradual change of custom has thrown thousands of them out of the employment which brought them to the city, but they have taken advantage of the education supplied by the Government and the foreign Missions and, while many have gone back to the land, the majority now obtain clerkships in the Government service or set up as small shopkeepers, and it is creditable that the residue of idlers, loafers and habitual criminals is not, under the circumstances, more numerous. In his usual surround-

ings the Siamese, though very far from being a glutton of work for work's sake, does sufficient to keep him in comfort according to his standards, and rarely comes to grief through sheer idleness. The women, whether in town or country, are always busy, managing their houses and children, trafficking in the bazaars, doing the light work in the fields, and marketing. The fact that women are seen paddling to market, their husbands reclining at ease in the boat, has been cited as an example of the superlative indolence of Siamese manhood, but in almost any country town of Europe a similar state of things prevails when, on market days, the country-women come staggering in under the weight of baskets of produce, accompanied by their men-folk who carry nothing but their pipe and stick.

The Siamese, like the Burman, is a spendthrift and, with rare exceptions, most unbusinesslike. He spends his money freely in the pursuit of pleasure, and provided he can laugh he takes no thought of the morrow, wherefore he too often becomes involved with the money-lenders to his ultimate undoing. Both men and women are inveterate gamblers and, since the Government has closed the public gambling-houses, indulge this proclivity by cock-fighting, by lotteries and in other ways. The race has many artistic leanings, all are enthusiastic lovers of the drama, while singing, dancing and the playing of various musical instruments are common accomplishments. The Siamese is vastly superstitious and arms himself with charms against every imaginable evil. Provided these and his auguries are all right, he is fairly courageous, but he will not venture his person where the fates appear unpropitious. The prospect of death, however, leaves him strangely unmoved.

The features of the Siamese are strongly Mongoloid. A wide head, flat at the back, a prognathous jaw, a flat nose very broad at the nostrils, long and slightly oblique eyes, large ears and high cheek bones, are the

usual physical characteristics. The result is not very prepossessing even according to the standards of Further India, while the customs, until recently universal, of wearing the hair short and erect in a stiff black brush and of blackening the teeth either by the constant chewing of betel or by the application of a dye obtained from burnt coconut shell, still further detract from the general appearance. In complexion the Siamese is on the whole slightly darker than the other Indo-Chinese races, but the colouring varies much with individuals, passing from the almost white of high-bred women, through infinite gradations to the deep chocolate colour of the sunburnt peasant. The skin is not tattooed except here and there with tiny charm-marks. The physique of the countryman is sturdy and well developed, that of the townsman less so. The legs are not so well formed as the upper part of the body, owing possibly to the fact that a large section of the people has lived for many generations in boats where the lower limbs are little used, while the arms and shoulders are constantly exercised in rowing and paddling. It is owing to this same reason, perhaps, that the women are usually square-shouldered, and, when seen from behind, surprisingly man-like. The average height is about five feet one inch for men, and four feet eleven inches for women.

The ancient Lao-Tai apparently noticed the fact that as their race moved southward the size of its people decreased, and a prophecy arose that when its descendants reached the sea they would be no larger than rabbits and would shortly thereafter disappear altogether. The Siamese have long ago reached the sea but, though the smallest people of their family, far from disappearing have become the most important part of it.

Costume. The principal garment of the Siamese, both male and female, is a cloth some $2\frac{1}{2}$ feet wide by 7 feet long, the middle part of which is passed round

the body, which it covers from the waist to just below the knees, and hitched in front so that the two ends hang down before. These ends being twisted together into a rope are passed backwards between the legs, drawn up and tucked into the waist at the middle of the back. The result is much like a pair of knee-breeches when seen from before, but frequently a considerable amount of bare thigh is revealed behind. The garment is called *Panung* and is clearly of Indian origin as it closely resembles the form of body-covering most prevalent in India, both in shape and in method of wearing. In olden days the women wore the *Panung* arranged like a skirt. When they took to tucking it up is not certain, but tradition ascribes the origin of the alteration to their having been compelled to equip themselves as men in order to deceive the enemy as to the size of the army during one of the sieges of Ayuthia in the sixteenth century A.D. A belt is usually worn by men but not by women to keep the *Panung* in place. The everyday *Panung* of the peasantry is made of cotton and at the present day is almost invariably of foreign manufacture. That of the townsfolk, more especially of the upper class, is of silk, or fine cotton, often of excellent quality and much beauty. Patterns are of great variety, but an ancient custom decrees a certain colour for each day of the week: Sunday, light red; Monday, silver grey; Tuesday, red; Wednesday, green; Thursday, variegated; Friday, light blue; and Saturday, dark blue. The dictates of this custom are obeyed as a general rule by the women and more rarely by the men. In the country the rustic bothers himself very little about clothes, sometimes wearing a short muslin vest in addition to the *Panung* but more usually going naked from the waist up. He is altogether peculiar in the matter of head-covering. For some reason the Siamese have nothing in the shape of a turban or head-cloth such as is worn in one form or another by the men of every



SIAMESE WOMAN.

(The twisted ends of the *Panung* may be seen at the back.)

race of Further India, and to supply this deficiency they wear hats, usually of foreign manufacture. The countryman affects various kinds and shapes but is most partial to a high-crowned and deep-brimmed black or brown straw hat which, before the war, came from Austria and of which large numbers are now annually imported from China into the country. The men who live in towns aspire to white drill coats of European cut, smart Homburg hats, cotton stockings and pipe-clayed shoes, all of which, when worn with the *Panung*, make up a neat and effective costume. The women formerly wore nothing in addition to the *Panung* except a light silk scarf called *Pahom*, wound loosely round the upper body so as, somewhat inadequately, to cover the breasts; but, though this is still the usual costume amongst the masses and is the indoor, or *négligé*, dress of the upper class, a variety of short jackets, tight and closely buttoned or loose and unconfined at the waist, are now common. The younger ladies of the better classes have taken to the wearing of European blouses, thin silk stockings and high-heeled shoes, and as they are gifted with a natural good taste in the matter of clothes, have evolved for themselves some very pretty and attractive fashions.

In the year 1921 the ladies of the Court abandoned the *Panung* and took to wearing the *Sin*, or Lao skirt, with European blouses, coats and even hats; and, after a few months' hesitation in this sort of half-and-half state, appeared in European costume all complete. In this adventure they were followed with indifferent success by the women of the official classes generally, the mass of the people meanwhile standing aloof and beholding the innovation with shocked surprise. It will be interesting to see the end of this movement.

A pale yellow face-powder is much used and flowers are worn in the ear, twisted into the hair, or in the form of garlands. Small children, as is usual in tropical

countries, wear no clothes except on special occasions, unless the small heart-shaped silver or gold disc, called *Chaping*, suspended by a cord before the person of little girls, can be dignified by the name. Jewellery, some of it of most artistic design, is much worn by women and children.

Many years ago it was the custom throughout the country for both sexes to wear the hair in a short thick tuft on the top of the head, the part round the back of the head and over the ears being shaved clean in the case of the men, and cut close, with the exception of a love-lock hanging before each ear, in that of the women. This custom gradually gave place to another which ordained that the men and women alike should wear the hair about an inch and a half to two inches long all over the head, which thus became exactly like a black mop. The wearing of long hair by Siamese men was never seen and by women was not encouraged. The females of English, French, Môn, Khmer and other foreign races might exhibit waving tresses, but in a Siamese woman it was considered immodest to do so and, in fact, was one of the signs of the demi-mondaine, another being the wearing of white teeth. Recently, however, the same forces have been at work in Siam as have impelled the ladies of Europe to emulate the half-world in their attire, and at the present day the wives and sisters of Young Siam, that is to say of the noble and official classes, have long black locks and flashing white teeth and sedulously search the columns of foreign ladies' papers for new modes of coiffure and for dentifrices. The country-women, however, are generally cropped, and here and there in the more outlying parts the ancient method of the short, thick tuft and lovelocks is still followed. The only hats ever worn by peasant women are stiff, circular sun-shades used by the peasants when at work in the fields.

It was formerly the custom for the finger-nails to be worn long by the well-to-do, somewhat after the Chinese

manner, but this usage has fallen into abeyance, and long nails on the hands of young men are now considered as a mark of dissoluteness.

Houses. Bangkok, which fifteen years ago was little more than a gigantic but higgledy-piggledy collection of thatched timber houses and mat huts, crowded together on the edges of the canals in the most complete confusion, is now rapidly becoming an orderly and well-laid-out masonry-built city. The spirit of change, however, has scarcely reached the country districts and there the people continue to construct their dwellings in the manner and after the model sanctified by ancient usage. The typical Siamese house stands on the bank of a river or canal and in the cool shade of spreading bamboo clumps. It consists of three separate oblong buildings placed so as to form three sides of a square and opening on to a central platform of planks or split bamboo. The whole structure is raised on posts some five or six feet above ground and is approached by a flight of steps on the fourth side of the square. Often this fourth side is closed to the outer world by a plank palisade, in the centre of which is the main entrance, at the top of the flight of steps. A house, however, rarely attains to these proportions straight away. It is usual for a young man, on setting up an establishment, to start with one oblong building, that is, one section of a completed house, and this may satisfy him for years, or may be added to as the family grows and wealth increases. Each oblong consists of one or more rooms open on the side facing inwards, on to a narrow verandah which skirts the central platform. For ceremonial reasons the floor of the verandah is slightly higher than the platform, that of the interior higher again, and there is sometimes an inner sanctum, the sleeping-place of the master, the floor of which is highest of all. The cooking-place occupies one room, whence refuse is constantly discharged through the interstices of the

floor to form a black and festering pool below. Cattle are also frequently stabled below the house. The building material employed varies from the flimsiest bamboo matting and thatch to solid teak and tiles. An intermediate quality, much used, consists of teak floors and joists, walls of plaited split bamboo, and roof of thatch made from dried fronds of the Nipah palm. The roofs, whether of grass, Nipah, or tile, are always high, steep and pointed. A word must be said of the floating houses which line the edges of the river and the larger canals in Bangkok and other towns situated in the plains where the waters are subject to tidal influence. These are nearly always built of teak and covered with Nipah thatch. Two oblong roofs with gable-ends, united side by side by a gutter, with a third much smaller roof at the back, cover a square floor of about forty feet each way, which rests upon two or three large floating pontoons. The space is divided into a front and a back room with kitchens and store room behind and a small verandah in front. The walls are usually of panelled teak and are frequently enriched with carving round the cornices and door-frames. More usually than not the front room is fitted as a shop. The house is always moored facing outwards on to the river and is approachable by water, though a back door is sometimes connected with the land by a single removable plank.

Food. The staple food of the Siamese is rice and fish. Near the sea or the inland fisheries, fish is eaten fresh, and in other parts it is always available cured and pickled in various ways, from the ordinary sun-dried variety to the evil-smelling putrid paste known as *Kapi*, in which latter form it is used as a condiment. Fresh rice is obtainable everywhere and in fact is usually kept in the husk and milled with a wooden pestle and mortar, or in a rough hand-mill, as required. Meat is also eaten, but, owing to religious scruples

regarding the taking of life, is rarely obtainable except when cattle die of old age or sickness, or where a Chinese pork-seller is within reach. Of vegetables a great variety, including cucumbers, pumpkins and gourds of many kinds, several sorts of beans and pulse and the tender shoots and leaves of innumerable trees and shrubs, are used as food, as are, of course, all kinds of tropical fruits. Food is dished in small bowls arranged on a tray and served on the floor, and is eaten with the fingers, the women usually placing themselves a little behind the men and eating after them. A copious drink of water concludes a meal, but nothing is drunk while food is being eaten. The regular meal-times are early morning and sunset, but food is frequently taken between whiles during leisure moments, and a midday meal is becoming common in the capital. All Siamese know how to boil rice and to prepare the simple dishes which they mostly use, but amongst the better class townspeople cooking is carefully studied, and has long been raised to the level of a fine art. The ladies of the highest class are taught cooking and take much pride in the accomplishment, paying special attention to the concoction of curries and the confection of sweets. A well-prepared Siamese curry is a thing of pure delight and offers a series of sensations quite novel to the palate of the European gourmet.

Birth, Childhood and Adolescence. The birth of a Siamese infant takes place in a small room sometimes constructed in the space under the house but more usually screened off from one of the upper rooms, where the mother lies on a bed from the neighbourhood of which all evil spirits have been carefully excluded by charms and exorcisms. The baby is received at birth by several wise and aged women by whom it is carefully washed and at once examined for any marks or peculiarities which may guide the soothsayer in prognosticating its future. It is then left very much to

itself while the mother, stretched upon a broad plank, is subjected to the heat of a great fire, a treatment which is considered, throughout Further India, as the only sure road to a rapid recovery, but which, in fact, often seriously compromises matters and is the chief cause of the disappearance of the good looks of the women of this part of the world at a comparatively early age.

All newborn infants are called *Deng* or "Red One," much as English children are called "Baby," with the prefix *Ai* or *Paw* if a boy and *I* (pr. "ee") or *Meh* if a girl. A fortnight or so after its mother's cure is completed, that is, when the child is about a month old, its head is shaved with the observance of many formalities and a brand-new horoscope is drawn up for it by the family soothsayer, whereupon it is presented by its proud parents to an admiring circle of friends and relations invited to assist at the ceremony. About the time when the child is able to walk it becomes necessary to provide it with a more distinctive name than that of Master, or Miss, "Red." The soothsayer is again called in, the horoscope is carefully examined, other portents, if present, are considered, and a name is ultimately selected from among those suitable to the year, month, and day of birth. The soothsayer, if duly instructed and properly remunerated, can usually arrange with the fates for a name in accordance with the fancy of the parents, but latterly it has become common to dispense with his services, and to give any name desired, regardless of the horoscope. The baby early introduces a *régime* of tyranny into his home. His mother, father and other relations are all his humble slaves, his lightest wish is law and he is spoiled and petted by all who come near him. At the age of two or so he condescends to be weaned, and about the same time, a plump, yellow and happy little person, he begins to explore the outer world. He disports himself in the comfort of absolute nudity,

bathing in the canal or playing in the dust with the tropic sun beating harmlessly upon his shaven poll until, at the age of four or five, head-shaving is partially discontinued and he begins to grow a lock of hair on the top of his head which his mother carefully oils and tends and twists into a tight knot and transfixes with a more or less ornate pin. Shortly after this he begins to wear clothes, and his education, consisting at this time in the amassing of infinite fairy lore, begins. At the age of seven or eight years he goes to school at the village monastery or perhaps, if he lives near one, to a modern school. His course of life here diverges from that of his sisters who, having led an existence entirely similar to his own up to this point, are usually debarred from the joys and sorrows of book education and now begin to be inducted into the household duties which will form their care in later life. Between the age of ten and thirteen the top-knot of both girls and boys, which has been all this time agrowing, is cut off, a formal proclaiming of the adolescence of the wearer, attended by intricate rites and ceremonial in which Buddhism and Brahmanism both have part. Thereafter the girls return to their household pursuits and, developing rapidly into women, soon achieve their destiny by marriage. The boys continue their education, and at the age of twenty or so receive what may be called their confirmation in the Buddhist Faith. This is accomplished by the formal admission of the youth into the Holy Order of the Monkhood. It is a tenet of Buddhism that no man can attain to the true completeness of his manhood until he shall have renounced the world for the monastic life and belonged to the Holy Order of Mendicants. Since the vows necessary upon taking Orders are not irrevocably binding but can be cancelled at will, every young man, though intended for a lay career, takes them upon himself as a part of his preparation for life. It is usual for a number of youths

to enter the monkhood together, and the occasion is one of much rejoicing, feasting and merrymaking on the part of their relations. Dressed in the gorgeous but curiously shaped garments which tradition assigns as the correct costume for royalties and other magnificent persons, the aspirants form a procession with their relatives and friends and a bevy of the fairest maidens of the neighbourhood, visit their acquaintances, show themselves in public and ultimately present themselves at the temple where the officiating monk and his assistants await them. An impressive ceremony follows during which the youths, after a stern catechism, change their splendid costume for the yellow robes of the Holy Order, receive the begging bowl, the fan and other insignia, and finally are accepted as inmates and take up their abode in the monastery precincts. The whole ceremony expresses a following in the footsteps of the Buddha, the princely costume of the novices representing the magnificence of the Royal Siddhartha, and the bevy of young women the worldly vanities and temptations from which he freed himself by the Great Renunciation.

After the lapse of such period as the new monk, or more generally his parents, may think proper, release from the oaths is given, when the youth quits his temporary retreat and resumes his place in the lay world. Three months is the usual time for a boy who has no thought of the monkhood as a permanent calling to wear the yellow robes, but nowadays the period is frequently shortened to a month, a fortnight, or even to a few days only.

Marriage. The Siamese men usually marry at the age of twenty or twenty-one, the women at fifteen or sixteen. The old maid is an anomaly almost unknown in the land. Although marriage and all the preliminaries thereto are surrounded by considerable formality and ceremonial, and many marriages are arranged by relatives without consideration for the feelings of the

parties, yet sufficient intercourse is permitted between young people, always within the limits of a proper and rigid decorum, to render marriages of affection, or at least of inclination, the most common. The Siamese girl, a quiet, modest, good-mannered little creature and sometimes of an attractive appearance, is far behind her Burmese and Lao sisters in the art of captivating the hearts of men, for the exercise of which she is handicapped by the very strict observance of the proprieties in which she is brought up. Hence her love affairs are seldom violent, nor do they often proceed to any dangerous length.

A youth looking for a wife, having conceived an inclination towards some girl of his acquaintance and found her not adverse to his mild pursuit, points her out to his parents as the girl he would like to marry, and having thus taken the initiative,*allows the matter to pass out of his own immediate control. If the girl is known to be of fitting station and otherwise suitable, the running is then taken up by an aged and respectable female known to both families, who, being instructed thereto by the parents of the boy, proceeds, with the exercise of much fine diplomacy, to ascertain the feelings and attitude of those of the girl. The result being satisfactory, mutual friends of a sedate age meet and discuss the matter and, if no impediment appears, visit the parents of the girl when the marriage is arranged, provided always that the horoscopes of the principals, when examined by an expert, reveal no insurmountable obstacle in the way, of antagonistic birthdays or irreconcilable destinies. The question of settlements is an important one, both families being required to contribute to the capital on which the young people will start life and to share the expenses of the wedding. The ceremony, if properly observed, takes place at the house of the bride and lasts for two days. The bridegroom†, escorted thither by his friends and a hired band, makes suitable presents to his lady and

her father, and is installed in the room, a temporary adjunct to the bride's parental home constructed at his own expense, where the honeymoon will be passed. He and his relatives now present to the parents of the bride their share of the *Thūn* or capital on which the young establishment is to start life, and also a tray bearing all the paraphernalia for betel-chewing and which, as the most significant part of the ceremony, gives the name, *Kān Māk*, to the whole business. Meanwhile the main part of the house fills with acquaintances, friends and relations, who eat, drink, and make merry, while a choir of monks chant doxologies and repeat Buddhist formulæ appropriate to the occasion. Then also the *Thūn* is carefully counted over and discussed. Later the bride and bridegroom appear, and kneeling together united by a holy cord, have rice sprinkled upon them and holy water from a conch shell poured over them by the guests. They are then separated from each other, and the boy spends the rest of the night serenading his lady-love with the assistance of his hired band. On the following morning a feast is given to the officiating monks, spasmodic merriment continues through the day, and in the evening the bride is formally conducted to the specially prepared chamber of hymen and there left, for the first time since her betrothal, alone with the bridegroom. The couple continue to live with the bride's family for some months, often until the first child is born.

To save expense the marriage ceremony is very often cut short at the point where the bridegroom presents the *Thūn* and the betelnut tray, the bride being brought to him immediately afterwards. In cases where the girl is of much lower social position than the boy, all ceremony is often dispensed with, as is naturally the case also on occasions when, the parents withholding consent, the parties elope together. These last unions are looked upon by the world as quite regular, and

children resulting therefrom are equally legitimate in the eyes of law with those born of marriages at which full ceremony have been observed.

Polygamy, being nowhere directly forbidden by the teachings of the Buddha, is considered permissible, that is, a man may contract connubial relations with as many women as he can afford to keep, but only the first, or chief, wife is married with ceremony and she remains the acknowledged head over all subsequent members of the household. The wives frequently live all together in the same house, in fact as a lady gets on in years she usually deems it politic to surround her husband with lesser wives, whereby he is kept from roaming and her own importance as the head of a large household is enhanced. In the case of the first wife, divorce is a matter of mutual consent and division of property, but though thus easy of attainment it is avoided if possible on account of public opinion. Lesser wives can be put away at the will of the husband. All children participate in inheritance, but those of the first wife are entitled to a larger share than others. No stigma whatever attaches to the position of lesser wife. While the households of the nobility often attain to very large dimensions, the lower classes practise polygamy very little.

Death. The firm and unshakable belief in the chain of past and future existence and in the temporary nature of heaven and hell, with which every Siamese is imbued by his religion, robs death of most of its terrors for him. Consequently, when to his dying ear comes the reiterated cry of *Phra Arahang! Phra Arahang!* "Lord! Lord!" by which his sorrowing relations seek to fix his mind upon the Great Beatitudes, though he may realize that this means death immediate, his failing thoughts turn rather to speculation as to his future birth than to the horrors of his present situation and impending dissolution, and thus he dies, borne up and comforted at the last by the kindly philosophy

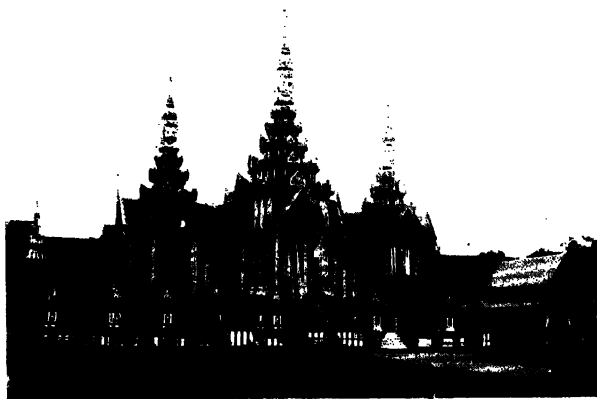
which has eased his path through life. After death the body is washed by the relatives, enshrouded in clean white cloth and, with a coin placed in the mouth for the payment of toll at the gates of Paradise, is placed in a coffin. During this ceremony a choir of monks intone sacred verses and formulæ impressing upon the survivors the vanity of worldly things and the sorrow and illusion of human life. A band also plays persistently to ward off evil spirits, and spasmodic lamentation is kept up, sometimes by persons hired for the purpose. The coffin, coloured black and ornamented with silver paper trimmings or gold leaf, is then placed upon a bier in the principal room of the house and is watched by the relatives for one or two days and nights with intermittent accompaniment of music and holy recitations for the pacification of the ghost of the departed. During this time the relations of the deceased are "at home" to their friends and receive their condolences in return for light refreshments. The watching ended, the body is usually carried to the temple where it is either cremated immediately or deposited until sufficient funds have been collected, and preparations made, for a cremation suitable to the position of the deceased. Sometimes, however, the corpse is kept in the dwelling-house for a period which may extend to many months. When the coffin is removed from the house precautions are taken to confuse the ghost of the departed as to the direction taken. It is carried out through a hole made in the wall instead of, through the usual exit, the bearers then march round the house several times before setting off for the temple, and finally carry the body three times round the funeral pyre before depositing it to be burnt. Thus the ghost, after its body has been destroyed, cannot find its way back to haunt its home but must go straightway to the place where it will await re-birth either in Heaven, Hell or elsewhere, according to the stock of merit acquired during life.



ROYAL CREMATION. THE LYING IN STATE.



ROYAL CREMATION. THE FUNERAL PROCESSION.



FUNERAL PYRE OF H.M. THE LATE QUEEN MOTHER.

It is the desire of every Siamese to secure for himself as imposing a cremation as possible, and his sorrowing relations usually see that he gets it. In Bangkok there is a cremation season, falling about April or May, when an enormous amount of money is always spent upon the obsequies of those who have died during the past year. At this time the relations of a departed worthy, having invited all their acquaintances to the spot where the cremation is to be held, bring out the body, and with the observance of carefully regulated ceremony, place it upon a funeral pyre, the height and magnificence of which vary with the opulence of the family. Feasting, music and theatrical performances continue for two days in temporary buildings erected for the purpose near the pyre, and on the second day the pyre is lighted, the relations and friends assisting the conflagration with burning tapers and scented combustibles. Lotteries are held for which the tickets are free and the prizes numerous, money is scattered amongst the crowd of poor who attend, and at night a display of fireworks is given. Throughout the proceedings choirs of monks intone homilies, and it is a point of honour to entertain with food and presents as large a choir as possible. The expenditure of money is, in fact, lavish to a degree, and it sometimes happens that the whole of a man's estate is dissipated by his heirs in their endeavours to gratify his spirit with a sumptuous burning. The cremations of deceased members of the Royal family are events of the greatest importance, and are held at intervals of a few years, when all those of the royal blood and of those whom the King delighteth to honour, who have died since the last ceremony, are cremated in succession upon a pyre of great magnificence. Such a ceremony partakes of the nature of a public festival and lasts sometimes for a month, during the whole of which time thousands of people are fed daily and entertained with all manner of diversions at the Royal expense. The body of a

deceased prince or of a very high noble is not laid in a coffin but is placed in a sitting position in a large urn of copper within a shell of gold and stands in state on an ornate pedestal in the principal room of the late owner's house. Here it remains surrounded by the insignia and paraphernalia of the status and occupation of the departed, and by memorial wreaths, from the time of death to that of cremation. Each stage of the final ceremony, the bringing of the body in procession to the spot where it is to be burnt, the placing of it upon the pyre, the lighting of the fire and the actual burning, and lastly the collection of the bones and ashes, is the affair of a separate day. The King takes the most prominent part in the whole of the proceedings, lighting the funeral pyre with his own hand with sacred fire from one of the Royal temples. The whole Court, clad in mourning, is present at each function. The ashes which are collected after cremation, are preserved in small golden urns and on certain periodical occasions are produced and made the object of reverent ceremonies. The ashes of the common people are likewise collected after cremation by their relations and are preserved with much care in little urns, one or more of which may be seen in almost every house. Persons who die of cholera or other rapid and violent disease are buried for a time and afterwards exhumed and burnt. Formerly it was usual to expose the bodies of paupers and criminals at the public crematorium where they were devoured by vultures and pariah dogs. This custom, which provided one of the stock sights for foreign visitors to Bangkok, has been done away with and all such bodies are now cremated. The public crematorium is situated just without the city wall, the gap in which giving access thereto is known as *Pratu Phi* or "The Gate of Ghosts."

The Lao are so nearly related to the Siamese and so closely resemble them in appearance and customs that they are now included in most Government and other



NORTHERN LAO. HUSKING RICE



LAO SÔNG DAM WOMEN.



A VILLAGE MARKET, N. SIAM.

statistics, with the Siamese themselves, and it seems probable that, with the linking up by railways of the different parts of the country and with the natural spread of Siamese influences, the two races will in time become completely merged. This is the more likely as the northern people resent being called Lao, a word which, as applied to them by neighbouring races, has acquired a contemptuous significance, and they often insist upon their right to be included with the Siamese as Thai.

The Lao of Siam are divided into two great clans whose chief distinguishing mark is the presence or absence of tattooing on the thighs and lower parts of the body. The tattooed Lao called *Lao Pung Dam*, or black-bellied Lao, occupy the whole of Northern Siam, extend well down into the Nakon Sawan Circle, and appear in scattered communities through Ayuthia and Nakon Chai Sri. Those who are not tattooed, *Lao Pung Khao* or white-bellied Lao, inhabit the valleys of the Middle Mehkông and its tributaries constituting the greater part of Eastern Siam, occupy a broad belt across the Pitsanulok Circle and are settled in isolated villages in the foot hills of the Nakon Sawan and Ratburi Circles. The tattooing in question consists of a series of pictures of very conventional animals and mythical monsters, covering the body from just above the ankles, or more usually from the knees, up to the waist. Each animal is surrounded by a broad line of cabalistic writing and any spaces between the figures are filled in with fanciful tracery. At the waist the pattern is finished off with a string of charm words. The process of tattooing is laborious and painful but, as is the case with the Burmese, it is considered by the tattooed Lao as an indispensable ornament of every grown man. The result gives a man the appearance of being clothed in dark blue tights. The colouring matter used is carbon obtained as the residue of burning coconut oil. Vermilion is also used for tattooing magic

squares and other charms which are often worn on the upper part of the body.

Both branches of the Lao proceeded originally from the ancient Lao-Tai people of south-western China, but the Mehkông Lao have been much longer in their present seats than those of Northern Siam. The latter, who have fairly close affinity with the Shans of Burma, represent the tribes from which the Siamese race is largely derived.

Formerly the Lao country was split up into a number of small states which, though feudatory to Siam (and sometimes, at intervals, to Kambodia and Burma), were each ruled by a chief whose office was hereditary and whose Court closely resembled in miniature that of the kings of Further India. Indeed the epithet miniature did not always apply, for at one time or another some of them, as for example Wieng Chan on the Mehkông and Chieng Mai on the Meping, were independent kingdoms, almost, if not quite on a par with their most powerful neighbours. At present practically all vestige of even partial independence of the Lao States has disappeared so far as Siam is concerned. The last chief of Wieng Chan died a prisoner in Bangkok a hundred years ago ; since then all the trans-Mehkông Lao, with the State of Luang *Phrabang*, astride of that river, have fallen into the hands of the French and, politically speaking, the *Lao Pung Khao* now living in Siam are merged completely with the Siamese. In the north the Chiefs of Chieng Mai, Nan, Pré and Lakon Lampang, the principal *Lao Pung Dam* States, still hold their titles, but have little or no authority, existing as pensioners of Siam with the purely nominal status of President of the Council, a body of Officials appointed for each State, under the control and at the dictation of a Siamese Viceroy located in the neighbourhood with a strong staff of assistants.

The Lao man is so like his Siamese cousin that, but



LAO OF LAPLÉ : NORTHERN SIAM.



LAO WOMEN OF UBON, R. SIAM

for his slightly heavier build and perhaps rather lighter complexion, it is almost impossible at first sight to tell them apart. When he speaks, however, he reveals his race, for Lao, though to a great extent the parent language of Siamese, differs considerably from the latter in pronunciation, in the absence of words of Khmer origin and the presence of many words that have become obsolete in Siamese. Nowadays the Lao masculine dress is identical with the Siamese except that the shaving of the sides and back of the head, leaving a mere tuft on the top, now abandoned by almost all the Siamese, is still practised by the Lao. At the foot of the hills to the west of Rajburi there is found a community of Lao known locally as *Lao Sông Dam* or "Lao Clothed in Black." These people are of *Lao Pung Khao* origin and resemble them in most of their customs, but the men wear tight-fitting short black drawers, black coat with silver buttons and black straw hats, while the women wear a black knee-long skirt relieved with broad blue lines, black scarves and black head-cloths. On special occasions both sexes wear a long black coat tastefully embroidered in colours, chiefly red. They claim to have come from the east about 150 years ago.

The women of the northern Lao proper wear a striped skirt falling from waist to ankle, a scarf thrown across the breast and over one shoulder, and sometimes a close-fitting jacket. Often, however, they go bare from the waist upward. Their hair is worn long, is fastened in a knob at the top of the head and is commonly adorned with flowers. They are fairer and of fuller figure than the Siamese women and, with their distinct advantage of costume, have a more pleasing and more feminine aspect.

The Lao of the northern or tattooed variety seem to possess most of the good qualities of the Siamese and few of the bad, for while they are equally polite, hospitable, and obedient to authority, they surpass

their southern cousins in honesty, peacefulness and sobriety. They are moreover more industrious, and perhaps more truly religious than the Siamese. These remarks do not, however, apply to the eastern or non-tattooed Lao, in whom the standards of morality and virtue are not high.

The position of their women approaches that of the Burmese in its absolute independence, and in fact Burmese influences, the result of old-time conquests and occupations of the Lao States by Kings of Ava and Pegu, are visible in many of the customs of the Lao as well as in their style of architecture and their religious rites and observances. The written character of the Lao is very similar to that of the Shans and is derived from the ancient Môn rather than from the Khmer. The differences between the Lao and Shan languages are hardly more than dialectical, and in fact, in the Burmese Shan State of Keng Tung just north of the Siamese frontier, the Lao shades off into Shan by almost imperceptible degrees. The difference between Lao and Siamese is more marked, by reason of the great influence of the Khmer language upon Siamese, whereby innumerable Kambodian words and also wide differences in pronunciation have been introduced.

Opinion is divided as to the source from which the Lao derived their religion. At one time it was taken for granted that Buddhism had reached them from the south as a result of the Cingalese Mission to Further India of the fifth century A.D., but it is difficult to maintain that explanation in the face of evidence which has more recently come to light, showing that the Lao were Buddhists long before that time, and it is now generally supposed that the Lao-Tai family first received their religion from Northern India in the form of Northern Buddhism, brought it down with them when they penetrated Further India and, coming in contact with Southern Buddhism as imported from

Ceylon, adopted many of its tenets in preference to those of the version they already knew.

The northern Lao are all Buddhists, but their faith is more strongly tinged with Animism than is that of the Siamese. • Traces of the ancient Naga or Serpent-worship and of the spirit-worship common to both peoples are more emphatic among the Lao, and the propitiation of the minor deities of the house, the field and the fells, as well as of the old Brahman gods masquerading in more or less effective disguise, is a consideration of much more importance with them. In the matter of charms and spells they are more credulous than the Siamese, and this trait is much pandered to by the monks, many of whom pose as witch-doctors, prophets and charm-mongers, thereby acquiring great local influence which is not always used in the interests either of the Buddhist religion or of the temporal Government.

In the arts the Lao are well advanced according to the standards of Further India. In silver-work, carving, embroidery, painting and music, they fully equal the Siamese. The favourite musical instrument is the *Ken*, the instrument described above as used by the Muhsö and other northern tribes but of a more highly developed type. The *Ken* of the Lao is made in all sizes, from the small pocket affair which almost every man plays, to the large instrument of fourteen or more reeds, of sonorous tone and wide compass, which is used by professionals. • The *Ken* has long ago made its way to the south and is very much admired by the Siamese. One of the Royal Princes, a highly-accomplished musician, has arranged European music for an orchestra of *Ken* with the most effective result, the plaintive airs of Scottish song and the syncopated accompaniment of modern dancing being found peculiarly adaptable to this strange instrument.

Shan. A few Shan, whom the Siamese call Ngïou and sometimes Thai-Yai, or great Thai, have found

their way from the Burmese Shan States into the North of Siam, and small colonies of these same people have long been established in Bangkok where they are general traders, and in Chantabun whither they were originally attracted by the neighbouring gem mines, at one time entirely in their hands.

As is the case in Burma, parties of Shan Pedlars, twenty to thirty strong, are frequently encountered on the country roads or in the railway trains, hawking cheap commodities from the far distant bazaars of Maulmain or Rangoon, or making their way back to Burma with Korat silk and Chantabun gems.

The Shan seen in Siam differ in no way from their countrymen in the Southern Shan States who have been described so often in books on Burma and the Shan States. Their language, in construction more primitive but phonetically more pleasing than Siamese, of which it is one of the parents, is that common to the whole vast territory stretching from Bhamo to Muang Sing, and their religion, customs, apparel and manners are as those of the people of Keng Tung and that neighbourhood.

In the year 1901 the Shan inhabiting Northern Siam rose in revolt against their Siamese rulers and, descending suddenly upon the town of Prè, destroyed the Gendarmerie station and killed the Governor and several of his staff. They then attacked Lakon Lampang and, though their numbers was never great, had things very much their own way until troops sent from Bangkok drove them back into their mountain fastnesses. This episode, trivial enough in itself, had far-reaching effects, for it revealed to the Siamese the weakness of their hold on the Lao States, the poverty of their rural administration and the inadequacy of their military arrangements, which triple revelation was the direct instigation of some of the most important administrative reforms of the last twenty years.

The Lü closely resemble the Lao. Their advent into

the north of Siam is comparatively recent and was the result of disturbances in the Sipsong Panna, the headquarters of their tribe. They have spread themselves over most of the Nan District of Northern Siam and are also found in large numbers in the British Shan State of Keng Tung. They are, if anything, rather taller and better built than the Lao. Those who inhabit Siam shave the head at the sides and back, leaving a tuft of short hair at the top after the old Siamese and present Lao method. They are Buddhists, and the Valley of the Nam Ngau, their principal stronghold in Siam, contains many monasteries. Even more than the Lao, they mingle spirit and demon worship with their Buddhism with, as usual, the entire concurrence and active assistance of the monks. The men, who are invariably tattooed in the Lao manner from the waist to the ankles, dress in the widest of baggy trousers and shortest of double-breasted coats, made of dark blue cotton cloth embroidered with small pieces of scarlet flannel, with bead-like seeds and sometimes with rows of mother-of-pearl shirt buttons. They cover their head with a great white or red turban, and the wide Shan straw hat, which is worn on the top of the turban and hanging down in three flaps, is a good deal affected. They carry long daks or swords, daggers, and sometimes a flint-lock gun, with the inevitable embroidered shoulder-bag or haversack, containing pipe, tobacco, betel and other odds and ends. Their general appearance is strongly reminiscent of the (Ngiou) Shan. The Lü women, who are always buxom and sometimes pretty, keep their hair long and do it up on the top of the head. They wear a skirt or petticoat much like that of their Lao sisters and cover the upper part of the body with a long-sleeved jacket folded cross-wise over the bosom and deeply embroidered round the edges. The pretty carelessness or perhaps coquetry which causes the Lao ladies to neglect the too close veiling of their charms, is not a trait of the

Lü. The Lü of both sexes follow the (Ngiou) Shan practice of piercing the lobe of the ear and distending the hole so made until it is capable of accommodating a roll of paper, a disc of wood or other object sometimes as much as two inches in diameter. « With the very well-to-do this ear-plug is sometimes formed of a thin strip of gold rolled up cylindrically, and as much as four ounces of the metal is sometimes carried in each ear.

The Sam Sam are a community of half-breed Siamese who inhabit the western coast districts of Southern Siam. In many respects they resemble the Malays and would in fact be practically identical with them but for their repudiation of Islam. Prior to their exploration by Messrs. Annandale and Skeat in the beginning of this century, the Sam Sam were almost entirely unknown to the outer world. They are a small and unimportant community and tend to become reabsorbed amongst the Siamese.

UNCLASSIFIED TRIBES.

Karien. The 30,000 or so Karien who inhabit the western and south-western mountain ranges of Siam are, as has already been intimated, an overflow of the Karien, or Karen, people of Burma, of which country they form a fifteenth part of the entire population. The various clans, their appearance, costume, customs and religion have been so fully set forth by Sir George Scott and other writers on Burma as to render further description of them almost superfluous. The Karien of Siam are chiefly of the Pwo and Bwé sects, the Sgaw being practically unrepresented. They are of a home-loving disposition and seldom wander far from their native mountains. They are, however, regular visitors to the bazaars of the Siamese towns and villages in their neighbourhood. « They cultivate hill-rice on the steepest slopes near their villages and



KARIEN WOMEN. ME SAWT DISTRICT.

[Photo: McBell]



CIVILIZED KARIENS, KWAA NOI VALLEY.



(
KARIEN WOMAN. ME SAWT DISTRICT. [Photo: *McBeth*

weave their own clothes from home-grown cotton. Their other wants are supplied by the barter of oddments such as tin ore which they mine spasmodically, deer horns, etc., in the Siamese markets. The men are usually thin and spare of build but of an extreme wiriness. Under all or any conditions they are entirely at home in the jungle, and as trackers and hunters of big-game are far in advance of all other inhabitants of Siam. They wear cotton shorts, or a striped cotton skirt of the scantiest length, and a loose jacket or more often a gabardine, and the Bwé wear their long hair twisted up in a headcloth the end of which is made to protrude like a horn over the forehead. The Pwo keep the hair short. They are seldom without arms, consisting of a dah, a spear and sometimes a rusty cheek-gun.

The women are fair and those of the civilized communities in the Meklong valley are of a comparatively pleasing appearance. The same remarks might apply to the females of the wilder Pwo and the Bwé, were it not for the excessive dirtiness of themselves and everything about them. Their principal covering consists of a smock or gabardine, a garment easily contrived from a single piece of cloth with a slit in the middle through which the head is passed, and with the sides sewn together. Sometimes this constitutes the whole costume; at others it is short and falls over a more or less embroidered skirt descending sometimes to the knees and sometimes to the ankles. In the case of the Bwé clans the smock is usually absent, being replaced by a covering for the upper part of the body made of a simple strip of cloth thrown over one shoulder, spread out over the bosom and fastened down back and front by a cloth belt at the waist. The black bands of lacquered cane worn below the knee by so many hill people of Further India are never absent from the limbs of the Karien women. Their costume is decorated with embroidery of pearly seeds,

strings of which are also worn round the neck and waist; silver rings or studs sometimes ornament the ears and, after marriage, a coloured cloth is worn on the head.

The Karien of Siam, except a few of the more civilized, who have adopted Buddhism, are purely spirit worshippers, being still beyond the reach of the Christian Missionaries who have converted the greater part of their fellow tribesmen in Burma. Their ritual takes the usual form of sacrifice with its attendant feasting and heavy drinking of strong rice spirit. They are experts in the art of hill cultivation and obtain good crops of rice and maize from their extensive clearings. Their houses are long barrack-like affairs built principally of bamboo and thatched with grass. The children have their ears pierced while very young and are usually promised in marriage before the age of six. Divorce is a matter of mutual consent, and the custom of cutting off the ears of women taken in adultery renders that offence of rare occurrence. A death is announced by salvos of firearms and much beating of gongs. Funerals are accompanied by dancing, feasting and drinking. The deceased is buried in a coffin with his weapons, tools, etc., beside him, and a temporary hut, erected over the grave, is stored with food and implements indicative of his favourite pursuits. In their funeral customs and at many other points the Karien bear a striking resemblance to the Kachin of the north and north-east of Burma, a fact which may possibly be of some future assistance in throwing light upon their origin. The art of divination by means of an inspection of the bones of slaughtered fowls is much practised among them, and in fact no Karien will marry, build a house, start upon a journey, plant his crops or take any decisive step in life without first seeking the approval of the spirits as indicated by the bones. Such divination is conducted by experts, and the exact rules by

which the auguries are interpreted have not been revealed.

Iron smelting and metal working are not unknown to the Karien, and those of Siam make their own knives, ploughshares, hoes and other implements. A cast brass gong known as the "Frog Gong," celebrated through the Far East and formerly one of the most prized possessions of Far Eastern Royalty, is associated with the Karien because it came originally from their country and is used by them in all their ceremonies. The instrument, which is in fact made by Shan dwellers amongst the Kariens of Burma, is shaped more like a drum than a gong and is cast in two parts which are afterwards joined together. It is still much valued by all Further Indian people and also in China.

Sakal. With the last adjustment of the Anglo-Siam frontier across the Malay Peninsula, the Sakai practically disappeared from amongst the Races of Siam, only a few individuals, in number probably less than a hundred, remaining in the most inaccessible parts of the Patani Circle. The race has been dealt with by Skeat and Blagden in *The Pagan Races of the Malay Peninsula*, to which monumental work the student is advised to turn for the most complete information extant concerning it.

PART III.

HISTORY.

UNTIL recently the history of Siam prior to the fourteenth century A.D. was practically unknown, the only available literature relating thereto being the heterogeneous collection of disjointed stories and fragments known as the *Pongsawadan Muang Nua* or the "Annals of the North Country," compiled at different periods from such of the official records of various cities and kingdoms as had escaped the destruction which at intervals overtook the communities to which they referred. These annals were rare and difficult of access, and because of the numerous supernatural happenings recorded in them were, even when found, considered by the very wise as unworthy of all credence. Of late, however, the valuable researches of a small group of enthusiasts, deciphering the annals of neighbouring states and the lithographic inscriptions found in various parts of the country, and delving amongst the chronicles of the Emperors of China, have brought to light a multitude of facts bearing upon ancient Siam, and the labours of H.R.H. Prince Damrong, the Rev. Pere Schmitt, Frankfurter, Fournereau and others, have shown that the annals of the North Country, though certainly rich in fantastic nonsense, contain after all a great deal of truth as well.

These labours reveal the condition of Siam at the dawn of historical time as a land inhabited by primitive people of the Môn-Khmer family amongst whom had settled parties of their more civilized cousins from Kambodia, bringing with them the religion and the customs acquired by contact with colonists from the south-east coast of India and possibly with the people

of the very ancient Lao settlements in the Mehkông Valley. Such communities grew from mere villages into cities, sometimes of importance, at the same time putting out offshoots in all directions, and these in time became the capitals of small states with undefined borders, the chiefs of which, constantly seeking to extend their dominions, made fierce war on each other and against the Lao-Tai tribes which they found upon their flanks, reducing or being reduced by their neighbours, whilst every now and then a more than usually able ruler arose and dominated the rest, welded his conquests into a more or less enduring kingdom and sometimes repudiated the vague overlordship claimed by the ancient Empire of Kambodia over the whole congeries. To these researches is also due what is known concerning the incursions into Siam of the Lao branch of the Lao-Tai group, the gradual fusion of this family with the Môn-Khmer, and the consequent evolution of the Thai race of the united Siamese Kingdom.

Of the period subsequent to the fourteenth century A.D., contemporary records are more easily available. The *Pongsawadan Krung Kao*, or "Annals of Ayuthia," contain a complete and fairly accurate record, compiled in successive reigns of the history of the country from 1349 to 1765 A.D. Also the seventeenth century saw the production of many books by European missionaries and others, of which Siam was wholly or in part the theme, and some of these contain not only accurate descriptions of the momentary condition of the country but also many historical references of value and importance. Siam was not prolific in literature of any kind during the eighteenth century, a period of continual war and frequent revolutions, but the reconsolidation of the kingdom and the dawn of the Bangkok era induced a partial renaissance of the arts and also a flow of historical literature which, increasing steadily in volume down to the end of the nineteenth

century, supplies very complete information as to all recent happenings.

The Môn-Khmer tribesmen were no doubt very numerous and were dispersed over all the land of Siam in ancient times existing above sea level. The oldest settlement of these of which anything definite is known was Haribunjaya, or Sukhodaya, situated on what is now the Meyom River at a spot about 200 miles north of Bangkok and which, about 300 B.C., was apparently a fair-sized village community, the members of which belonged to a Brahman sect. At first putting forward no pretensions to the status of a kingdom, the settlement appears to have increased somewhat rapidly in importance, for about two centuries later the Chief (Phva Dhammaraja) made himself king of the district, built the new capital of Sawankalok (also called Sajanalaya), the construction of which occupied seven years, and appointed one of his sons, Uloka Kumara, viceroy of Haribunja or Sukhodaya, which itself soon grew into a fortified city. Thereafter the two towns served alternately as the capital of a country which under the name of Sri Sajanalaya Sukhodaya, and later the kingdom of Sukhothai-Sawankalok, grew by slow degrees to great wealth and strength. Its monarchs, claiming Kshatriya descent, surrounded themselves with the ancient Brahman ceremonial of India, most of which is observed without very much change at the Court of Siam at the present day, and their time was largely occupied with the waging of war upon the kinglets of neighbouring states founded in the same manner and upon the same principles as their own but at somewhat later dates.

Sukhothai (Sukho, happiness, Thai, free), a corruption of Sukhodaya, "the Abode of Happiness," suggests a possible origin of the term "Thai" applied to the Siamese race and a totally different word from "Tai," the race name of the great north branch of the Lao-Tai family.

In course of time the kingdom of Sukhothai-Sawankalok reduced all its neighbours to a condition of vassalage and became generally recognized as the capital of the whole country. The vague and usually inoperative suzerainty of Kambodia continued for many centuries but with little or no effect upon the destinies of its nominal dependency, which was left to manage itself and its group of subordinates as seemed to it best. The principal of those lesser states which for a long period alternately admitted and denounced the suzerainty of Sukhothai-Sawankalok, was Sri Wijaya, also called Samarattha and later Supan, the first capital of which was built, probably about 150 A.D., on a site at that time close to the sea at the head of the Gulf of Siam, though it is now twenty-five miles inland. As Sri Wijaya the state flourished for some 800 years, successive kings adding to the buildings and fortifications of the capital and embellishing the magnificent pagoda, the graceful spire of which, often restored and more than once practically rebuilt during successive ages, still dominates the district long known as Nakon Chai Si (Nagara Jaya Sri) and now called Nakon Pathom. About the tenth century A.D., Phra Phan, the then reigning monarch, a person whose varied and stirring career included, according to the legends, many years of exile, the slaying of his own father and the conduct of more than the usual number of military campaigns, deserted the capital as the sequel of an unfortunate war with the vassal state of Rajapuri, now called Rajburi, in which the Suzerain Power had been temporarily worsted, and retiring northward, founded a new city which he called Suwarnabhumi, close to the site of the modern town Supan. Some 250 years later a descendant of Phra Phan ruling in Suwarnabhumi suffered defeat at the hands of a Peguan prince, and when the invader was afterwards driven away with the assistance of the king of the neighbouring state of Lopburi, also a nominal

vassal of Sukhothai, the rescuer, as the price of his help, annexed Suwarnabhumi to his own kingdom.

About the middle of the fifth century A.D., an individual to whom the chronicles give the sounding title of King of Taksila Maha Nakon, but who was apparently no more than a rebellious Governor of the Sukhothai-Swankalok province of Taksila, founded two settlements on the banks of the main river of Siam, one of which must have been near the edge of the sea and the other about thirty miles inland. The former was called Dwaravati, or later Dwarapuri after the mythical seagirt city of Krishna, and the latter received the name of Lawapuri, Lawo, or, as it is now called, Lopburi. The two settlements grew side by side, both claiming to be the capitals of kingdoms comprising the surrounding country districts, but after some centuries of rivalry Dwarapuri was absorbed by Lopburi, the latter becoming in time subject to spasmodic control by Sukhothai and also to occasional beatings from the armies of Kambodia, the paramount power in the south.

Yet another southern state was the kingdom of Nakon Sri Tammarat or Lakon, corrupted by the Malays to Ligor, situated on the east coast of the Siam-Malay Peninsula, about latitude $8^{\circ} 25' N$. The date of the first appearance of a consolidated kingdom in this neighbourhood is uncertain, but there is evidence that travellers from both India and China knew of a capital city on the north-east coast of the Peninsula at a very early period, while the "Annals of the North" describe Lakon as waging a temporarily successful war against Lopburi in the ninth century A.D. In very early times the kings of Lakon were the overlords of the entire Siam-Malay Peninsula, and though the advent of the Malays and the establishment of the Malacca Power destroyed their rule in the southern parts, they continued until comparatively recently (when the sub-kingdom became a mere

province of Siam), to be the acknowledged masters of all the central and northern districts. Lakon was always subject to much foreign influence. Indian and European traders made it a centre for the collection of merchandise and in the wars between Siam and Pegu its situation contiguous to the frontier caused it to be frequently occupied by the Peguan forces. The cult of Brahmanism flourished greatly there in the middle ages and it remains at the present day the last stronghold of popular Brahmanism in Siam.

But it was not only against their Môn-Khmer cousins that the several states in Siam found occasion for the exercise of their military proclivities. The Lao tribes inhabiting the mountain districts on their northern outskirts had for long demanded a certain amount of attention, and as time went on, and these, emboldened by increasing numbers, took to avenging past oppression by raiding the villages in the plains, it began to be evident that these erstwhile contemptible savages were growing to the proportions of a serious enemy. In fact, as early as the fifth century A.D., the reduction of the Lao in the north had become almost the main business of the kings of Sukhothai-Sawankalok. Expeditions against them were constant; they were frequently overthrown, and large numbers were from time to time carried captive to Sukhothai or Sawankalok, but the intercourse which was thus brought about served only to strengthen them, for they copied and adopted the Môn-Khmer customs and civilization with which they thus became acquainted, and turned their knowledge against their instructors with pertinacity and an ever-increasing measure of success.

A Lao city was founded about 575 A.D., being built in imitation of the Khmer capitals, at a spot about 250 miles north of Sawankalok, and to this was given the name Haribunjaya, an early name of Sukhothai, which afterwards became corrupted to Lampun Chai,

then to Lamphun or Labong. The Lao Chief of this settlement obtained as his consort a daughter of the Rulers of Lopburi, the Princess Cama Dévi, and here a succession of the descendants of this union reigned, closely observing the Brahman rites and royal ceremonies in vogue at Sukhothai, and encouraging both Brahmanism and Buddhism amongst their people. Other Lao states grew into prominence, of which the most formidable was Chieng Sen some 300 miles north of Lampun, and here also the Royal etiquette followed that of Kshatriya Courts. The time soon came when the Khmer could no longer keep the Lao in check. During the succeeding centuries the Lao arms were carried far south into the kingdoms of Lopburi and Lakon, alliances between Khmer and Lao kings became of frequent occurrence, the royal families intermarried, and Lao settlements were formed in various parts of Southern Siam.

Despite the wars with the southern states and with the Lao, and notwithstanding occasional trouble with Kambodia, the Sukhothai-Sawankalok kingdom grew and prospered greatly and in time attained to a considerable degree of civilization. Not war alone occupied the attention of its succeeding kings. The arts were encouraged, the people were well and systematically governed, trade was extensive and friendly relations were maintained with China and other distant lands by means of frequent interchange of embassies. Early in the seventh century A.D., envoys from the Emperor of China visited Sukhothai and found the country wealthy and powerful. The envoys have left records of their visit from which it appears that the people were chiefly engaged in the cultivation of rice and other cereals and in the manufacture of sugar, and that in their manners and customs they to a great extent resembled the present inhabitants of Siam. The records also describe the appearance of the capital, its fortifications and buildings, which evidently followed, though

in degenerated form, the style of Khmer architecture visible to-day in the ruins of Angkor, Pimai and other places, and they enlarge upon the royal state kept by the king.

In later times, with the further growth of the kingdom the capital must have become a great and rich city, for here were gathered together the spoils and the tribute of all the surrounding countries which from time to time were brought under the yoke. Here Peguans from the west, Kambodians from the east, Yunnanese and Lao from the north, Môn-Khmer from the cities of the south, and not a few traders from India, attracted by the wealth of the metropolis or carried thither as prisoners of war, must have rubbed shoulders with the native population in the streets and market-places, scattering and prostrating themselves before the palanquin or the elephant of the king, as it passed by amid a crowd of red-clad guards.

Of all the Khmer or Lao-Khmer, or Siam-Khmer kings who reigned over the State of Sukhothai-Sawankalok, either in one capital or in the other, during the thousand years or so which include its period of growth and the zenith of its prosperity, historians of the present day put names to very few, of whom, moreover, two, the first and second rulers of the State, are semi-mythical creatures of whom nothing more is known than that they were the ancestors of the long line of forgotten royalties which followed them, and whose names even, Phra Dhammaraja and Uloka Kumara (which may be taken to mean respectively "Royal Progenitor" and "the Dawn of Freedom,") are possibly of comparatively recent invention. Of the remaining names the principal are those of the royal hero, Arunawati Ruang, alias Phra Ruang, of his father, and his son, the last of whom was also the last true king of the State of anything like unmixed Khmer blood. King Apayagamuni lives in history only as the father of Arunawati Ruang,

which dignity he is said to have achieved by a chance union in a forest with a princess of the "Naga," a dragon-like being of the underworld who took human form for his ensnaring. Concerning the hero himself a thousand legends are extant, in which his superior piety, intelligence, wit, and the miraculous powers inherited from his mother, play an important part. He is said to have begun by freeing his country from the yoke of Kambodia; to have adopted a modified Khmer alphabet (*Khom*) for use in scriptural writings; to have invented the Siamese alphabet; to have established the era known as the Chula Saka, imposing the same upon the Lao, Khmer, Burmese and Chinese people, and to have performed many other works of the greatest magnitude and importance.

There is, however, some reason to believe that the exploits of Arunawati Ruang are mostly fiction. It is no uncommon thing to find in the early histories of Further India, the birth of heroes attributed to the silvan philanderings of Princes with "Naga" ladies, but since the term "Naga" is applied in many parts of India and Further India to savage tribes as well as to the underground dragon-people, it is possible that the objects of the princely attentions were mere simple, but probably attractive, hill-girls, and thus the mother of Arunawati Ruang may have been far from competent to endow her son with miraculous powers. From time to time during the history of Siam, civil wars and other political upheavals have caused such connected records as existed to be scattered abroad and lost. The Annals of the Sukhothai-Sawankalok kingdom, which doubtless once existed, have long since disappeared and the works which now pass in Siam as relating the history of the Ancient States are no more than collections of vague fragments gathered from various sources, pieced together in a latter age without any knowledge of their chronological sequence. The "Annals of the North" place the birth of

Arunawati Ruang somewhere between 407 A.D. and 618 A.D. but recent comparison with the chronicles of contiguous countries has shown that the event almost certainly occurred in the eleventh century A.D. It is probable that the historians of the past, finding the name and existence of this undoubtedly remarkable king standing out as solid facts in a foggy sea of mere conjecture, clung to them and fastened upon them events for which this individual monarch was not responsible but which were known to have happened, and for which they were forced to find an author to the best of their ability.

Sukhothai-Sawankalok certainly threw off, or tried to throw off, the Kambodian yoke, and that many times, and it may even be that King Arunawati Ruang was reigning when one of these bids for independence was made, but there is absence of proof that his particular rebellion was anything more remarkable than those of his predecessors. That a somewhat modified form of the Kambodian alphabet, now known as *Khom*, was in use in the state during the later period of the Khmer kings is not open to doubt, and indeed it would be strange if this were not so, in view of the common origin the close relationship between the Khmer of Kambodia and of Sukhothai-Sawankalok, but there can be little doubt that it was the result of an adoption and subsequent gradual alteration of the alphabet of a superior civilization and no more the outcome of the inventive genius of one man than is the series of characters collected from Kambodia, Pegu and from the Lao, which forms the modern Siamese alphabet. An inscription on stone, found at Sukhothai and the subject of recent discussion, establishes the fact, however, that King Arunawati Ruang undoubtedly ordered the substitution of the early Siamese for the Kambodian alphabet for use in official writings, but this proves nothing as to the genesis of the former. The invention of the Chula Saka era has

been claimed for kings of Kambodia and Burma as well as for King Arunawati Ruang. Evidence is still lacking as to where and by whom this era, common to all Further India, was first inaugurated, but in the inscriptions which have been found among the ruins of Sukhothai and Sawankalok, though many of these were executed as late as the fifteenth century A.D., or about the middle of the eighth century Chula Saka, the dates inscribed upon them are always the older Buddhist era ultimately displaced by the Chula Saka, from which it would seem that if King Arunawati Ruang invented the latter, both he and his successors took care not to use it. It appears from the histories of Burma and from traditions of the Lao States that the Chula Saka was imposed upon the latter after one of the victorious incursions of the Peguan arms into the Lao country. Thence its use passed to Sukhothai-Sawankalok and Siam, but, though almost universally employed in Pegu and Burma from the tenth century, A.D. down to the present day, it did not come into general use in Siam until the sixteenth century A.D., when successive Burmese wars brought Siam and Burma into frequent and close contact.

But though Arunawati Ruang is not to be credited with all the notable events of the Khmer periods of Sukhothai-Sawankalok, he seems to have been a great king, for during his reign the country reached the zenith of its prosperity and when he died, about 1090 A.D., he left to his successor, Phra Sucharat, an empire including much of the northern Lao States and all the southern Khmer kingdoms of Siam. His heir, however, was not left for long to the peaceful enjoyment of his inheritance. During the eleventh century A.D., the Kings of Lopburi and Lampun, both vassals of Sukhothai-Sawankalok, had been intermittently at war with each other, the suzerain Power taking no part in the matter, but about the end of the century Lopburi was overcome and, declaring itself subordinate

to Lampun, admitted large numbers of Lao to settle within its borders. Shortly after the death of Arunawati Ruang a great Lao army composed of the warriors of several allied states and led by the Chief of the northerly state of Muang Hang, known as Sudhamma Raja, invaded Sukhothai-Sawankalok itself, defeated its armies, overran the Khmer lands to the south, reduced all the cities, and founded the capital of Vishnuloka now called Pitsanulok to the south-west of Sukhothai and in the heart of the Khmer kingdom. Thereafter Sukhothai and Sawankalok became more or less subordinate to Lao domination and their rulers very little removed from a condition of vassalage to their ancient enemy. This may be said to be the beginning of the end of the period of Sukhothai-Sawankalok supremacy in Siam for, though its chiefs continued until considerably later to maintain regal state, no turn of fortune ever again restored them to the paramount position of their forebears. The slow but sure decay of these proud cities began from this date. The strength of their enemies waxed while their own waned; each succeeding ruler found himself of less importance than his predecessor, until at last, with even the semblance of royalty shorn away, some four centuries after the founding of Pitsanulok their rulers were no more than provincial governors representing the kings of Siam (Ayuthia).

Sudhamma Raja, King of Pitsanulok, like most other Lao, was apparently an admirer of Khmer institutions for, in setting up his throne in the conquered country, he ordered himself and his surroundings as closely as possible in imitation of Sukhothai and, by following the traditional policy for a Lao invader and marrying a lady of the country, set an example in matrimony which the hordes of his followers from the north were not slow to copy, and thus gave an immense impetus to that fusion of Lao and Khmer which, already in process in Lopburi, was soon to

result in the evolution of the Siamese race. Two sons were born by the Khmer wife, Princess Padoma Devi, of the House of Sukhothai-Sawankalok, to her royal husband, one of whom, Kesara Sima by name, was in his turn married to a princess of the house of Sukhothai-Sawankalok, and was sent by his father to rule over the vassal state of Lopburi (about 1110 A.D.), while the other succeeded his father at Pitsanulok.

From the date of Kesara Sima's accession to the throne of Lopburi, the pivot of Siamese history is shifted from the north and the great plain of Central Siam becomes the stage on which the drama of the contending nations is chiefly played. Sukhothai-Sawankalok was sinking; Pitsanulok rapidly declined from its brief glory after the close of Sudhamma Raja's reign, and the Lao chieftains of the north became involved in internecine strugglings which occupied them fully and which ultimately caused the fall of Lampun and the rise of Chieng Mai. Lopburi therefore became the centre of the combination and acquired an importance which is proved by the fact that both Kambodia and Pegu having undertaken to conquer the country, made Lopburi their principal objective. About this time also the Lao-Khmer half-breeds, whose numbers had increased with surprising rapidity all over the country but more especially in the neighbourhood of Lopburi, began to look upon themselves as a distinct race and to be known as the "men of Syama" a name which had from the most ancient times been occasionally applied to the group of states which occupied Siam, and which began to supersede the individual names of those states, more closely united now than heretofore.

But though the "men of Syama" were thus becoming the "Siamese," they were yet far from acquiring the status of "Thai" or "Free." Not many years after the accession of Kesara Sima, Lopburi was badly beaten by Kambodia, a fact which is borne out by

inscriptions at Angkor Thom, the ancient capital of the latter kingdom, and hardly had the armies from the east retired when a host of Peguans attacked the Siamese from the west, overthrew them completely, exacted promises of allegiance, and retired with a princess of the Lopburi royal family as a bride for their king. Thus, towards the end of the twelfth century A.D., Siam occupied the apparently unpleasant position of simultaneous vassalage to two different Powers. Fortunately, however, such subjection was merely nominal and, temporary subordination being a position to which the vicissitudes of war had long accustomed the nations of Further India, it was not allowed to interfere greatly with the local ambitions of the State. But it seems to have been thought that Lopburi was unlucky as the capital of the Lao-Khmer kingdom, for about 1180 A.D. King Narai built a new city of Nong Sano close by the ruins of Dwarapuri, the city which had been founded at the same time as Lopburi and afterwards destroyed. King Narai, having repudiated the suzerainty of Pegu, was shortly attacked in his new capital by King Nares, a son of the late king of Pegu and the Lopburi princess, and consequently his cousin. It is related that on this occasion the contending monarchs had recourse to a method of settling their differences which appears to have been in fairly common use among the nations of Further India. The annals of the multitude of states which participate in the history of Burma, Siam and Kambodia recount numerous instances of opposing armies abandoning their war-like front and setting to work to build pagodas, dig tanks or perform other works of merit in competition with each other, under agreement that the honours of the campaign should rest with the army which first completed its task. In the present instance it was arranged that each army should build a pagoda. In a few days the besieging host had far outstripped the defenders, and disaster to the new city of Nong

Sano seemed imminent when King Narai adopted the ruse of completing his building with a light structure of bamboos and cloth, gilded and made to resemble the genuine brick and mortar article. Thus the enemy, full of confidence, awoke one morning and to their consternation beheld from their camp outside the city, the tall spire of an apparently finished pagoda flashing in the sunlight, whereupon without further inquiry they acknowledged defeat and retired in disorder.

The dawn of the thirteenth century A.D. saw the beginning of the last and greatest influx of Lao into the south of Siam. The vigorous suppression of the Lao-Tai undertaken in South-west China, culminating with the victories of the Chinese Emperor Kublai Khan, drove many thousands of this people down into the mountainous country north of Siam, where the newcomers upset the balance of power amongst the older Lao and caused the disruption of several of their states. Hence certain small potentates of ancient lineage, finding themselves homeless in their own lands, gathered their followers together and sought to carve out new fortunes for themselves further south. Descending the Me Ping, the principal river of north-western Siam, hordes of these wanderers established themselves at Muang Taksila, Kampeng Pet and elsewhere, combining with the inhabitants and rapidly acquiring great strength. Thence, after an interval, they struck further south, wrested Nakon Sawan from the Nong Sano Power, founded the capital city of Supanburi close to the ruins of ancient Suwarnabhumi, reached Rajburi and ultimately overran the southern peninsular state of Lakon. All this, however, was not accomplished in a day. By the time the Lao kings had consolidated their power and fixed themselves in their capital of Supanburi they, like the former invaders of Sukhothai-Sawankalok and Lopburi, had become inextricably mingled with the original population, and the thirteenth, and half

the fourteenth century had passed away. The State of Nong Sano had fared badly during this period. Shorn of its western provinces and subjected by Kambodia to a continual drain in men and treasure, it gradually sank into complete insignificance and, when the King of Supanburi, fleeing as is supposed from a pestilence, marched westwards to found yet another capital, Nong Sano fell into his hands almost without a struggle. Its king, the weak descendant of the glorious Sudhamma Raja of Pitsanulok, fled to Kambodia, and Phra Chao U Thong, the King of Supanburi, erected close by the ruins of the fallen city and on the site of the ancient Dwarapuri, the city of Maha Nakon Sri Ayudahya (Ayuthia), destined to achieve a world wide fame as the capital of one of the greatest kingdoms in the history of Further India and to be the seat of the kings of Siam for upwards of four hundred years.

In the year 1350 A.D. Phra Chao U Thong, under the new title of Phra Ramathibodi, was installed as King at Ayuthia and for a long time afterwards was fully occupied in bringing the outlying states and provinces to acknowledge his sway, in organising a system of government and in the framing of laws many of which were of surpassing excellence and continue in use to the present day. In time the kingdom comprised the cities of Sukhothai, Sawankalok, Pitsanulok, Pichai, Pichit, Kampeng Pet, Nakon Sawan, Supanburi, Rajburi, Lakon and Chantabun with their subordinate towns and districts, and these not merely in a state of nominal subjection but under a more direct control than had been the case since the palmy days of Sukhothai-Sawankalok. It was further claimed that Tavoy, Mergui, and Malacca were also subject to Ayuthia but this was probably mere vaunting, since the Peguans were at this time in actual occupation of Tavoy and Mergui while the Malays had, as early as the thirteenth century A.D., made

themselves finally independent in Malacca, and had by now extended their power considerably farther north. In fact Ayuthia had now succeeded to the whole of the Sukhothai-Sawankalok kingdom, the component parts of which, by dint of treaties, matrimonial alliances and other weapons of diplomacy, were welded together to such an extent that when Kambodia, annoyed by the independent attitude of what was still officially considered a mere appanage of the Kambodian Crown, sent an army to re-assert its rights of suzerainty, a strong and united enemy was met, who not only advanced to try conclusions with the invader, but defeated him, drove him back, and followed him far within the confines of his own country.

King Ramathibodi died after a reign of nineteen years (1369 A.D.). Thereafter events moved quickly, for, before the close of the century, five of his descendants had followed each other upon the throne, while two successful wars had been accomplished, one against the Lao capital of Chieng Mai and the other against Kambodia. Chieng Mai was taken and added to the Kingdom, whilst Kambodia, the old oppressor, was at last really beaten, its capital destroyed and a large number of its inhabitants captured and brought to swell the population of Ayuthia.

The fifteenth century A.D. opened with the usurpation of the throne by a cadet of the royal family, whose direct descendants succeeded each other for more than a hundred years. This period comprises the reign of seven kings, under whom the state continued to gain in strength and importance, a vast treasure being at the same time expended in beautifying the capital with stately buildings in the style, though somewhat degenerated, of the Kambodian-cum-Môn-cum-Lao architecture of Sawankalok, in fact, the Siamese style. Buddhism had by now definitely replaced Brahmanism as the popular religion, and,

not only in Ayuthia but in many of the provincial cities, great numbers of mendicant priests were supported, while the graceful spires of Phrachedi and Phraprang, reliquary shrines called indiscriminately "Pagoda" by Europeans, arose in every direction. About 1434 A.D. Chieng Mai, which had thrown off its allegiance, was again invaded and reduced to submission, suffering once more a loss of many thousands of its inhabitants carried off to Ayuthia.

In 1527 Siam fell under a regency. The king was a minor and the reins of government were in the hands of his mother. This unnatural parent, in order to facilitate usurpation by a man of low birth of whom she had become enamoured, caused her son to be murdered, but her schemes were frustrated by the nobles and the people, who slew both her and her paramour and crowned an uncle of the late king. Shortly afterwards another invasion of Kambodia was undertaken, but nothing decisive was accomplished.

At about this time marauding bands of Siamese from Lakon, acting under orders from Ayuthia, penetrated far into the province of Tavoy, subordinate to the King of Burma and Pegu, and there performed exploits which astonished and enraged the Burmese. Though engaged in a campaign in Arakan, Thabin Shwé Hti, the Burmese king of Pegu, lost no time in collecting an army at Maulmain, which advanced into Siam under the command of Bureng Naung, the Pegu Heir-apparent. A battle was fought on the banks of the river near Supanburi, the Siamese were defeated, and shortly afterwards the Pegu Prince appeared before the walls of Ayuthia itself. Here, however, he met with a stout resistance, and operations were so much prolonged that his commissariat broke down and he was forced to retire. He was followed by the Siamese and fought many rearguard actions in which he lost heavily, and it was with a much reduced and thoroughly beaten army that he ultimately re-crossed

the frontier. Three years later, however, taking the assumption by the king of Siam of the title of *Phra Chao Chang Pheuak* or "Lord of the White Elephants" as a *casus belli*, Bureng Naung, now king, marched out of Pegu with a great host and, brushing aside all resistance *en route*, shortly laid siege to Ayuthia. To save the city the "Lord of the White Elephants" opened negotiations with the invader as the result of which several of the animals which had caused all the trouble, together with a royal prince as hostage, were handed over to the Burmese, who thereupon retired. A conflict of dates here occurs between the Burmese and Siamese histories. The chronicles of Ayuthia give the years of these two invasions from Pegu as corresponding with 1543 and 1547 A.D., while Burmese records place them in the years 1548 and 1553 A.D. Moreover the Siamese version has it that, after his defeat, the king of Siam entered a monastery, appointing his son Maha Indradiracha as his successor, whereas the Burmese maintain that the king was actually carried off along with his white elephants and afterwards permitted by his conqueror to enter the priesthood, his son being appointed governor of Siam under the Burmese. Both sides, however, agree that very soon after this the royal monk had discarded the yellow robe, and that he and his son Maha Indra, having repudiated Burmese suzerainty, were again on the warpath. This brought Bureng Naung, who was busy subduing Chieng Mai, back to Ayuthia, which place he once more besieged. The "Lord of the White Elephants" died, but Maha Indra continued to resist. Chieng Mai rose against Burma and, joining with Luang Prabang and Wieng Chan, sent an army to the assistance of Ayuthia. Things were beginning to look bad for Bureng Naung, when, by the aid of treachery, he gained admittance to the city and overcame the resistance of the Siamese thus reversing the situation. The place was then sacked and partially destroyed, and

King Maha Indra, with the majority of his people, was dispatched in chains to Pegu. The indefatigable Bureng Naung returned to Chieng Mai, conquered it and pressed on to Luang Prabang, the Chieftain of which place fled on his approach without daring to offer resistance. Burmese governors were appointed to both these states and the conqueror returned in triumph to Pegu, leaving a cadet of the Royal Family of Siam, the Governor of Pitsanulok, as his viceroy with the title Phra Tammarajdiraj, in Ayuthia. But scarcely had the Burmese withdrawn than that unfortunate city was again subjected to attack, this time by a Kambodian army sent to avenge late defeats and to reassert ancient claims to overlordship. The remnants of the population were, however, quickly gathered together, and managed to show a front too bold for the Kambodians, who retired content with the loot of the surrounding districts which the Siamese were powerless to protect.

And now, when the fortunes of Ayuthia were at the lowest ebb, when, despoiled of her treasures, her buildings in ruins, her people captives or fugitives, and her fair provinces given over to pillage by her enemies from east to west, she seemed doomed to extinction, there arose a hero destined to retrieve the fortunes of his native land, and to carry the Siamese arms, once more victorious, into the heart of the enemy's country. This was Phra Naret, a son of the regent Phra Tammarajdiraj. Appointed Governor of Pitsanulok by his father, he saw service while yet very young, both against the formidable Kambodian bands which periodically overran his province, and in the wars of Nanda Bureng, the son and successor of Bureng Naung of Pegu, against rebellious Ava. Having by his military skill aroused the jealousy and dislike of Pegu to such an extent that his life was endangered, Naret revolted, about 1565 A.D., and, while Nanda Bureng was occupied

before Ava, raised an army of Siamese with which he attacked and pillaged Tenasserim and Martaban. Nanda Bureng sent a force to avenge this raid, but it was met and defeated at Supanburi, that cockpit of the Siamese wars with Pegu-Burma. It was followed by another, led by the king himself, which fared even worse, being enticed into an ambush by the skilful dispositions of Naret, and almost annihilated. Naret was then proclaimed king of Siam, and at once set to work to recover the lost adherence of the outlying provinces; and this he accomplished with the usual sacking of towns and carrying off of captives to repopulate Ayuthia, which he now restored.

King Nanda Bureng was for some time occupied with internal wars, but, having at length established his supremacy throughout Pegu-Burma, he made another attempt to subdue Siam. He sent off a large army under the command of the Peguan Heir-Apparent to invade the country but fresh disappointment was all that he gained, for, though the army reached the walls of Ayuthia it suffered complete defeat there, the Commander-in-Chief and many thousands of his men being slain and the rest taken prisoners or put to flight.

The western foe being thus disposed of, King Naret turned his attention to the east. Burning to avenge the insults and miseries which had been inflicted upon his country in the time of her weakness, he now called his vassals together and invaded Kambodia at the head of a strong force. Lawek, the capital was besieged, and in spite of a spirited resistance was ultimately taken and destroyed. The king of Kambodia and many of his people were brought to Ayuthia, where the former was executed, Naret fulfilling an early vow by bathing his feet in the blood of his enemy.

Not content with these victories, King Naret now invaded Pegu-Burma. But meanwhile much had happened there. The feudatory princes of the Empire,

finding Nanda Bureng exhausted by his efforts against first Ava and then Siam, had rebelled and had captured and murdered their suzerain, entirely destroyed the Pegu capital and ravaged the surrounding districts. A period of internecine strife had followed resulting in the recognition of the king of Ava as supreme Lord. Thus when Phra Naret, having marched through Tennasserim, appeared before Hanthawadi the capital of Pegu, he found it in ruins and the remnant of its population starving. So complete was the devastation that the invaders could obtain no supplies and consequently, on the approach of an army from Ava, Naret retired, taking much loot and leaving behind Siamese Governors for the two provinces of Tavoy and Mergui, the people of which, owing to Burmese oppression, gladly welcomed annexation by Siam. Indeed many thousands of Môn voluntarily followed Naret to Siam where they were given lands, and where their descendants continue in much honour to the present day. After a short interval of rest, preparations were made for a more determined effort, and in the year 1593 A.D. according to Siamese history, or 1605 according to Burmese, a great Siamese host invaded Burma with the object of capturing Ava itself and thus subduing the whole country. But Siam was not destined to achieve this crowning triumph, for early in the campaign Naret met a soldier's death, and his son and successor abandoned the enterprise and withdrew the army.

Thus in less than thirty years Siam was raised by the skill and daring of one man, from the verge of national extinction to a position of ascendancy over all the other kingdoms of Further India. King Naret left to his son an empire extending from the 4th to the 21st degree of north latitude, and from the 96th to the 106th degree of east longitude. To the north and east, Chieng Sen, Chieng Mai, Luang Prabang, Wieng Chan and other Lao States, in the west the

provinces of Tennaserim, Tavoy and Mergui, and to the south Lakon and its Malay dependencies, were all recognised as lying within the frontier, while both the Kambodian and Burmese armies had been many times beaten and driven far away within their own borders. Siam, in fact, had become a Power, and so thorough had been the work of the builder that his empire did not crumble away immediately on his decease, as usually happened with Further Indian conquests but, in spite of revolutions and all manner of internal commotions and of more than one foreign war, held together for a subsequent period of 175 years.

After the death of Phra Naret, his son, his grandson, and his brother followed each other in quick succession upon the throne. A revolution then took place when the reins of government were seized by one Phaya Suriwongs, a noble of high standing. Under the title of Phra Chao Prasart Thong, this king reigned for over twenty years, and his death was the signal for a scramble for the throne at the end of which, in 1655 A.D., one of his sons, Phra Narai, after disposing of a brother and an uncle who barred his way, made himself undisputed master of the realm. Thereafter followed thirty-three prosperous and more or less peaceful years during which Commerce and the Arts flourished exceedingly, official relations were established with European Sovereigns, and Siam became known to the West as one of the rich and powerful countries of the Far East. At the beginning of his reign, Phra Narai invaded Burma, but the enterprise miscarried and the army was forced to content itself with the loot of some of the Lao States which had shown signs of revolt.

For some time past Siam had been known to the European merchant-adventurers resorting to the Far East under the flags of Portugal, Holland and England. Early in the sixteenth century A.D., the Malay kingdom of Malacca, to the suzerainty over which Siam asserted a shadowy claim, had been conquered by the Portu-

guese, and individuals of that nation had penetrated to Ayuthia and to Pegu. Portuguese volunteers were to be found in the ranks of both armies during the Burmese-Siamese wars, and it is on record that three Portuguese ships taking part in the defence of Ayuthia in 1548 A.D., were destroyed there. Portuguese traders also settled in the Siamese ports of Kedah, Mergui, Lakon and Pattani, taking some part in local politics, and in more than one instance rising to positions of trust in the service of the State. In the beginning of the seventeenth century A.D., Portuguese missionaries settled at Ayuthia where they were received with favour and given land for churches, and other advantages. At about the same time English and Dutch ships first appeared in Siamese waters and an obstinate rivalry soon sprang up amongst the foreigners, who competed for commercial supremacy and for the favour of the King and his governors, without which little or no trade could be carried on. This rivalry led to constant quarrelling and often to desperate fighting, an instance of the latter being the naval battle fought in the Pattani roads as early as 1619 A.D., when two English ships under the brave John Jourdain struck to three Dutchmen under Hendrick Johnson after the English commander had been killed. In 1634 A.D., the Dutch had so far prospered that they had built a fortified factory and had extensive commerce at Ayuthia and all over the country while the foreign carrying trade to China and Japan was in their hands. In 1641 A.D. the Dutch took Malacca from Portugal and thus sounded the knell of Portuguese influence in Siam. Many individuals of that nation continued, however, to live and trade at Ayuthia, their descendants persisting in Siam at the present day, bearing high-sounding Portuguese names, but otherwise, through constant admixture of Siamese blood,* showing small sign of their European ancestry.

The pushing Dutchmen soon supplanted the Portuguese at all points where the latter had established factories. They confined themselves chiefly to trade, and took little or no interest in Siamese politics except where their commercial prospects were affected. The first formal treaty contracted by Siam with any European Power was that entered into in the year 1664 A.D. with the representatives of the Dutch East India Company, authorised by the Dutch Republic. The Dutch continued to trade with Siam until the year 1706 A.D., when, their truculent disposition having led to frequent ruptures with the government, they finally lost the royal favour and shortly afterwards broke up their factory on the banks of the Menam Chao Phaya River, the site of which is still known as Amsterdam.

In 1659 A.D. there arrived at Ayuthia a European who was destined to mould for a time the fortunes of Siam and to lead the country into a political maze in which she came near to losing herself. The histories of India and the Far East are rich in romantic tales of European adventurers wafted by curious chances from the humble condition of soldier, sailor or merchant, to dizzy heights of power where they controlled the destiny of millions and whence they very often descended with a suddenness as amazing as their elevation. But few such stories can equal that of Constantine Faulkon, the son of a Cephalonian inn-keeper, who ran away to sea in an English ship and arriving, after many vicissitudes, in Siam, rose to be the Chief Minister and trusted adviser of King Phra Narai. Under the guidance of this man, to whose great abilities and numerous other good qualities the native and foreign chronicles of this period of Siamese history one and all bear witness, the country for a time prospered exceedingly. The Portuguese and Dutch traders already established were encouraged to extend the scope of their enterprise and the English



SEVENTEENTH CENTURY FORTIFICATIONS OF LOPBURI.



RUINS OF FAULKON'S HOUSE, LOPBURI.

and French East India Companies were also induced to set up factories at the capital. The King himself became the principal merchant in his own country and owned a fleet of merchant ships with which he did business, greatly to the profit of himself—and, incidentally to that of his First Minister.

In addition to the native inhabitants, Ayuthia had at that time a large population of Malay, Annamese, Kambodian, Burmese, Indian and Japanese settlers, the descendants of war captives and of persons who for one reason or another had fled from their own country; and an extensive trade was carried on with China, Japan, Sumatra and India. This city was therefore selected as the most central spot for the establishment of a Roman Catholic Mission which was being organised in France with the ambitious design of converting the whole of the Far East, and in the beginning of 1662 A.D., three French bishops with a staff of priests arrived to inaugurate the work. These were well received by the king and very soon the mission had secured a considerable number of adherents. In order further to strengthen their position the priests obtained the countenance and official support of Louis XIV. of France, who sent complimentary letters and envoys to Siam and had the pleasure of receiving the first Siamese ambassadors ever sent to Europe.

Faulkon, who had afforded the bishops much assistance in their labours and was apparently in their confidence, was thus brought into correspondence with Colbert, the great Minister of Louis, and in course of time the interest which had been aroused in the mind of the French king in the spiritual welfare of Siam, became diverted to things temporal and a scheme was set on foot for securing the supremacy of France in that far-away country, through the agency of the priests, who appeared to believe that with material support from France they could convert the King

himself to Christianity. Six French ships of war and a body of 1,400 soldiers were therefore sent to Siam, ostensibly to assist in over-awing the Dutch who were making themselves unpleasant from their stronghold of Malacca. The ports of Bangkok and Mergui, the gates of the country, were garrisoned by a part of these French troops and the King was prevailed upon to attach a select few to his own person. The missionaries then opened with their spiritual batteries but found that the conversion of the King was a more difficult matter than they had expected. Their obstinate insistence with him and his apparent subservience to Faulkon, who by this time had been created a Count of France, ended by alarming the Siamese. Remonstrances were made against the admission of an ever-increasing number of foreigners into the service of the State and, these passing unheeded, a conspiracy was formed, the King was taken prisoner at the summer palace which he had built at the historic city of Lopburi and was dethroned, Faulkon was killed, the European troops driven out of the country, and Siam was saved from a condition which must shortly have become that of a French dependency.

This *coup d'état* having been accomplished, the conspirators proclaimed as king, one of their number, an officer of high rank named Phra Petchracha, who soon restored tranquillity. He also revived foreign trade, disorganised by the recent commotions, by renewing diplomatic relations with France and by improving those already in existence with other European nations. He did not live long, however, and when he died the legitimate dynasty was restored to the succession. A son of King Narai and a grandson occupied the throne in turn for a few peaceful years. The latter died young, leaving two small sons, and while the nobles were deliberating as to the succession, an uncle of the lads, who, though he had long held the title of Uparach Mongkut, or Heir-presumptive, would

probably have been passed over, settled the matter by suddenly storming the palace at the head of his own followers, overpowering the guard, scattering the little princes and the nobility, and proclaiming himself king. A civil war was the result of this action, but the people soon found that the power had been seized by the strongest member of the royal family and ended by accepting the situation; the youthful princes disappeared and when the King died he was succeeded by his own sons.

Ever since the end of the sixteenth century A.D., the war between Siam and Burma, with the exception of various unimportant frontier raids, had been in abeyance, the Burmese kingdom being torn with internecine strife and therefore too weak to avenge the victories of King Naret, and the Siamese being occupied with the development of trade and commerce and with their own internal troubles. But about the year 1759 A.D., the great Alaung Phra having reunited Ava and Pegu and the outlying provinces of Burma, renewed hostilities against Siam by occupying Martaban, Mergui and Tavoy. He shortly afterwards invaded the country from the south, defeated a Siamese army at the crossing of the Meklông River near the head of the Gulf of Siam, and appeared before Ayuthia. Here, however, he was taken suddenly ill and, withdrawing his forces, died before he could regain his own country. A few years of peace followed when a raid into Pegu by the Chief of Chieng Mai gave the signal for a resumption of war. Sin Byu Shin, a son of Alung Phra had inherited the throne and the warlike qualities of his father. In 1766 A.D. he sent one strong force to punish Chieng Mai and at once set about collecting another at Tavoy. As soon as Chieng Mai and incidentally Wieng Chan and other Lao States, had been reduced to submission, the two armies advanced simultaneously upon Ayuthia, that from Tavoy following the old Supanburl route and that

from Chieng Mai descending the River Menam Chao Phaya. After several encounters with the inhabitants, the forces joined at Ayuthia and sat down before the city. A large Siamese army had been assembled within the walls and this, sallying out, engaged the Burmese divisions as they came up. The Siamese were, however, defeated in each case and very soon found themselves hemmed in behind their ramparts with supplies effectually cut off. The king of Siam at this critical moment was Somdet Phra Maha Bowarn Sucharit, a son of the Uparach Mongkut. Though unaccustomed to war, he showed a good front and encouraged his people to a vigorous defence. All through the dry season the enemy maintained a steady blockade and when the rains brought the annual floods, though forced to retire to higher ground, they patrolled the waters in hundreds of boats and thus effectively maintained the investment. The Siamese had hoped that the floods would cause the raising of the siege but were disappointed, for the Burmese held on and, as the waters subsided, threw up new earthworks near to the walls, making the investment closer than ever. Flying columns of the invading army pillaged the surrounding districts and drove off a Lao force which attempted a diversion in favour of the besieged. At last in the spring of 1767 A.D., the heart of King Sucharit failed him. He tried to leave the city but was driven back, he opened parley with the enemy but was rebuffed. The Burmese, reinforced from Ava, delivered an assault in force, overcame the weakening defence, and in the confusion and massacre which followed, the King escaped unattended, only to die of exposure a few days later.

Thus the city of Ayuthia finally succumbed to the Burmese. For four hundred and seventeen years the seat of powerful monarchs, the metropolis of an Empire and one of the greatest emporia of trade in the Far East, amid the smoke of a vast conflagration

her tall gilded spires and graceful palaces now disappear for ever from the pages of history. A great amount of treasure and many thousands of captives, including members of the royal family and several European traders and missionaries, fell into the hands of the Burmese conquerors and were by them transferred to Ava.

But though Ayuthia had fallen, Siam was by no means beaten, and when, therefore, Sin Byu Shin withdrew his army to meet a threatened Chinese invasion of Burma, the Viceroy who was left with a small garrison to rule the country, soon found himself in serious difficulties. With the fall of the capital, all the outlying provinces had quietly assumed independence, while the more central districts became infested with robber bands which plundered the country and continually united in harassing the army of occupation.

Again, as in 1565 A.D., the hour of Siam's adversity brought forth the man gifted with the qualities necessary to retrieve the fortunes of the kingdom. Phaya Tak Sin, an official who derived his title from the ancient city of Taksila Nakon, had deserted his king when Ayuthia appeared likely to fall and had established himself in the Chantabun district as a robber chief. Having collected together a gang of some thousand deserters and broken men like himself, he proceeded by intrigue and treachery to undermine the authority of the rulers of the south-eastern provinces of the country, and finally completed his ascendancy in those parts by the assassination at a supper party of the Chief of Bangplasoi with whom he had just made a firm treaty of friendship. By these and similar means Phaya Tak acquired a large following and in due course appeared as a national avenger before the walls of Ayuthia. The pro-Burmese garrison was soon overcome as were the Burmese outposts elsewhere, and the Burmese Viceroy was taken and killed, whereupon Phaya Tak made himself King. The village

of Tana-, or Ton-, buri on the river bank opposite Bangkok where stood the fortress once occupied by French troops, having been pronounced by the sooth-sayers to be a place of good omen, was chosen as the site of the new capital and very soon became a populous city. Thereafter the king set about consolidating his position and the reduction of the surrounding provinces. Towards the achievement of these objects the first step was the removal of Prince Mongkut Thépabut, an important survivor of the Royal House of Siam, whose just pretensions to the throne had many supporters. The prince had established himself at Korat, the walled capital of Eastern Siam, and thither the king despatched an army with orders to take the city. But, true to his successful policy of intrigue, Phaya Tak Sin sent secret emissaries in advance of his soldiers, who so demoralised the adherents of the prince that when the usurper and his forces arrived, after a leisurely advance, before the walls, the city fell into his hands practically without a struggle, and the prince was captured and soon afterwards murdered. By this feat the position of the king was made practically secure and he was able to send out expeditions in all directions, which in a few years stripped from the outlying provinces their new-found independence and made him master of the whole country from far down the Peninsula up to the northern confines of Luang Prabang ; the provinces of Martaban, Mergui and Tavoy remaining, however, in the hands of the Burmese.

King Sin Byu⁴ Shin having got rid of his Chinese invaders, made an effort to recover Siam and began by sending a force to reassert his authority in the Lao States, at the same time ordering the Governor of Martaban to collect troops for an attack on Bangkok. The enterprise, however, was a failure. The Lao of Chiang Mai refused to submit, Wieng⁴ Chan, though occupied, could not be properly garrisoned, the Môn

levies of Martaban mutined and deserted to the Siamese, and the death of Sin Byu Shin himself put an end to the operations.

Phaya Tak Sin now dispatched an army to invade Kambodia, over which country he, as King of Siam, claimed to have suzerain rights, and himself marched away to the north-east to expel the weak Burmese garrison from Wieng Chan. The Lao, joining with the Burmese, offered a spirited resistance and the city was therefore looted on being taken, the celebrated Emerald Buddha now preserved in the Palace precincts at Bangkok, being amongst the great treasure brought away.

In 1781 the king was overtaken by the fate he had so often prepared for others and fell a victim to intrigue. The appointment of his humble relatives to high offices gave offence to the nobility, and the popular mind was inflamed against him by insidious references to his regal excesses and his Chinese blood. He was dethroned by his courtiers, who gave out that he was mad, and offered the kingdom to one of their number, the son of a secretary to the last kings of Ayuthia. This nobleman, known as Phaya Chakkri and later as Somdet Chao Phya Maha Krasat Seuk, had achieved popularity by reason of his ability as a minister of the King and of the success of both himself and his younger brother as leaders of the royal armies. He was accepted as King with acclamation and ascended the throne in 1782 A.D. Shortly afterwards Phaya Tak Sin, his son, his brothers and several of his officers were all put to death.

Somdet Chao Phaya Maha Krasat Seuk was the first king of the present august dynasty, generally known to foreigners as the House of Chakkri. At his accession he took the usual royal title or list of regal epithets adopted by all kings of Siam and was known during his reign as "the Great King," expressed in various ways. Later, when he had been followed

by three descendants all bearing practically the same title and it became necessary to distinguish him from his successors, he and they were endowed with separate appellations and thus became known to posterity as Phra Buddha Yot Fa ; Phra Buddha Loet La ; Phra Nang Klao and Phra Chom Klao. Now, by a quite recent decree, His present Majesty has declared that the royal name should be the same for all the dynasty, that is the first epithet appearing in the royal title, namely Ramatibodi or more simply Rama. It will therefore be correct henceforth to consider the kings of the dynasty as Rama the First, Rama the Second, and so on.

The new king had not long been proclaimed when Bodaw Phra, king of Burma, began to make preparations for the reconquest of Siam and the exaction of tribute said to be due from the date of the fall of Ayuthia. When all was ready the war was opened with an attack by the Burmese on the island of Puket (Junk Ceylon) constituting a Siamese province off the west coast of the Malay Peninsula. A lodgment was effected but an army from Lakon (Ligor) speedily recovered the island and ejected the enemy. This was followed by the massing of troops at Tavoy, Martaban, and Chieng Mai, on completion of which operations (1785 A.D.) Bodaw Phra gave the signal for a simultaneous advance, himself leading the Martaban contingent. The king, however, was equal to the occasion. Mustering the veterans whom he and his brother had so often led to victory during the reign of Phaya Tak, he opposed the advance at all points. The Burmese commissariat was as usual but ill equipped and was quite unable to provide food for the large number of men in the field, while the Siamese had removed all local supplies from the different lines of march. The invaders began to suffer heavily from starvation, desertion and disease and, constantly harassed by the enemy, became demoralised. To make matters worse,

Bodaw Phra in a fit of anger, executed his principal general officer. The king at length boldly attacked the Martaban and Tavoy forces with all his strength. The Tavoy army was almost wiped out, while Bodaw Phra with the Martaban contingent was driven back over the Burmese border with the loss of half his numbers. The Chieng Mai force met with some success but, being unsupported, ultimately fell back on Martaban, leaving the Siamese everywhere victorious. Indeed the Burmese power was for the moment so completely broken that had the King followed up his success with vigour he would have found Burma at his mercy and might have signally avenged former humiliations by sacking Amarapura, the capital. But no advantage was taken of the dissipation of the Burmese forces for, though Mergui and Tavoy were attacked and occupied, no invasion was pushed home. The last-named two provinces were held for a few years but were ultimately abandoned. Bodaw Phra was, however, cured of his desire to conquer Siam. His attention presently became fixed on Arakan and the doings of the Honourable East India Company in that neighbourhood, and the country to the East was left in peace. In fact, with the final abandonment of Mergui and Tavoy in 1792 A.D. the wars between Burma and Siam, which had continued at intervals through so many centuries, may be said to have come to an end, for, though Chieng Mai, Keng Tung and the island of Puket were occasionally afterwards bones of contention between the two Powers, subsequent operations were never on a large scale and were rather the irresponsible raids of local levies than the undertakings of serious war.

King Rama I. now turned his attention to the consolidation of his kingdom and the organization of better government. Having moved the capital from Tonburi on the west to Bangkok on the east side of the River Menam, he built himself a palace and surrounded

it with a double line of fortifications, between the inner and outer of which a fair city soon arose, recalling both by the style of architecture and by the names of the principal buildings, the past glories of Ayuthia. The submission of the vassal provinces was secured, their rulers drinking the waters of allegiance and swearing fealty in Bangkok. Governors were appointed from amongst the King's most trusted followers to the charge of the provinces of Siam proper, and courts were established for the administration of justice in accordance with the ancient laws of the land, to which laws the king himself made many notable additions. Rama I. reigned for twenty-seven years, and dying, was succeeded in 1809 by his son Rama II, the great-grandfather of the present Sovereign.

In various Chinese chronicles and records, some of them of great antiquity, mention is made of Siam, of envoys and letters sent to and received from that country and of the exchange of presents between the Emperors of China and the Kings of Siam. The presents sent by Siam are represented in the Chinese records of later times, as tribute payable by a vassal state, but Siam was never invaded or conquered by China, and the earliest chronicles speak of envoys passing between the two countries bearing messages in which the rulers addressed each other in terms denoting equality. There is abundant evidence, however, that Siam, in common with the nations round about her, set considerable store by the friendship of the great and powerful Chinese Empire, and that any little attention received from China was the cause of self-congratulation. Also, the formalities observed in the offering of presents to China were identical with the homage exacted by the Kings who made them, from their own vassals on occasions of payment of tribute by the latter. Hence it seems probable that, whatever may have been the nature of the earlier presents, those made in the middle ages

and later were, in fact, propitiatory offerings made with the object of securing the good-will of an acknowledged Power and therefore to be regarded perhaps as, in some sort, tribute. It is probable that Siam came, in time, to look upon China with the respect that is sometimes felt by a younger for an elder brother, and there can be no doubt that some of the Siamese Kings who found themselves on the throne with no very particular right to be there, sought, in the ratification of their succession by China, an argument to strengthen their position in the eyes of their own people. It is on record (in China) for instance, that King Phra Naret, when he had retaken Siam from the Burmese, asked for official recognition by China of his right to the throne.

The last mention in any Chinese records of the submission of the so-called tribute by Siam to China occurs in the earliest years of the nineteenth century A.D., in the reign of King Rama I, since when the ancient custom has been allowed to fall into disuse. China certainly never made any pretence of assisting Siam in her wars nor, though she claimed both Burma and Kambodia as her vassals equally with Siam, did she ever take any step to check the continual onslaughts of the nations of Further India upon each other. A letter has been preserved, however, in which the Emperor of China, writing to the King of Siam about the year A.D. 1555, expatiates upon the charms of peace and exhorts his friend and younger brother to eschew barbarous war, the delight of savages, to cultivate the gentle arts, and to live in harmony with his neighbours ; but this, coming in reply to a prayer for assistance and arriving at a moment when Siam, hemmed in by enemies, was fighting desperately for very existence, can hardly be considered to have served any purpose other than the gratification of the writer's opinion of his own epistolary composition. The intimate unofficial relations which at present exist

between the two nations have been the result of commerce alone, and date from the beginning of the seventeenth century A.D., when the rice trade with China first began and a colony of Chinese merchants was admitted to reside at Ayuthia.

Military operations in Kambodia were undertaken early in the reign of King Rama II. Siam had now come to regard as her own the heritage of the birth-place of Indo-Chinese civilisation, and considered that she had acquired the right to demand tribute from the descendants of the worn-out Suzerain Power. But it appeared on the other hand that the King of Annam, away to the east, had also beaten the Kambodians and therefore put forward claims to tribute, possibly about as good as those of the Siamese. In 1786, however, during the minority of the Crown of Kambodia, the regent of the country formally recognised Siamese supremacy and sent the infant king to reside in Bangkok, himself continuing to govern the state under Siam. In 1809 A.D. an invasion by Annam took place and to meet this intrusion an army was despatched from Bangkok. The campaign was brief, however, and ended in an agreement by virtue of which the Kambodian province of Phratabong (Battambang), in which is situated the ruins of the ancient capital of Angkor, was annexed by Siam, while the remainder of the country became a dependency of Annam.

Except for this Kambodian affair in which neither the arms nor diplomacy of the conflicting nations gained much credit, the reign of Rama II was one of peace. In 1825 A.D. he died, when the throne was seized by one of his sons by a lesser wife, the rightful heir, Chao Fa Mongkut, a youth of twenty-one, retiring with a younger brother into the safe seclusion of the priesthood. The new King was known during his reign as Somdet Phra Chao Prasat Thong but has hitherto lived in history as Phra Nang Klao. He may

now be considered as Rama III. His reign of twenty-seven years was chiefly remarkable for the re-establishment of political relations with the nations of the West. In 1821 A.D. during the reign of King Rama II, the Hon. East India Company had deputed Mr. John Crawfurd as an Envoy to the Court of Siam with a view to making a treaty but nothing had resulted from that mission. In 1826, however, a second attempt was made when Captain Burney was received by King Rama III and a treaty of friendship and commerce was made between Great Britain and Siam in that year, providing for the settlement of petty disputes, the mutual surrender of criminals, defining spheres of influence in the Malay Peninsula and securing freedom of trade. This treaty which, with the exception of primitive essays with the Dutch in 1664 A.D. and with the French at the end of the seventeenth century, was the first entered into with a European Power, was followed in 1833 by another with the United States of America, regulating the treatment of American citizens resorting to Siam. Both the English and American Envoys suggested the propriety of establishing Consuls in Siam but against this the King was obdurate.

In 1828 A.D. a Siamese force invaded Wieng Chan. The capital of that state, which had been looted some forty years earlier on account of its Burmese sympathies, was now found to be intriguing again with the western kingdom and trying to foment a general rising among the Lao, wherefore its entire destruction was resolved upon. The resistance offered to the Siamese arms was speedily overcome. The Chief was captured and after the city had been reduced to a heap of smoking ruins, was brought with a large number of prisoners to Bangkok, where he was exposed in a cage to the taunts and insults of the populace until death terminated his sufferings. Wieng Chan did not recover from this blow. The State was broken up and the jungle has long overgrown the site of the ancient capital.

About 1844 A.D. Kambodian politics were again to the fore. Kambodia had shown no more alacrity in paying tribute to Annam than to Siam. Hence frequent commotions and continual fleeings of Kambodian notabilities to Siam to escape the Annamese ire. On one such occasion a child named Norodom, a son of the King, was brought to Bangkok where he was retained and educated at the Siamese Court. Some years later, on the death of the king, this child, now grown almost to manhood, was declared by Siam to be the rightful heir to the throne of Kambodia. He crossed the frontier with a Siamese army, gained possession of the country and, notwithstanding former arrangements, placed it once more under Siamese protection.

In 1851 A.D. King Rama III died and Prince Chao Fa Mongkut was invited by the people to take the crown which he should have inherited before. At the age of forty-seven, therefore, the Prince left his retirement and was crowned under the title of Somdet Phra Paramindr Maha Mongkut, his younger brother being created *Uparach* or *Wang Na*. The new King had occupied the twenty-six years of his monastic seclusion not only in the contemplation of "The Wheel of the Law," but also in studying the history and customs of his country, the English language, mechanics and other sciences then almost unknown in Siam, and also the manners, and systems of government, obtaining in the West. On his accession, therefore, he brought to bear upon the conduct of affairs a very unusual degree of education and enlightenment, which, together with his naturally high intelligence and with that insight into the actual conditions of his people which life as a mendicant monk had given him, soon resulted in numerous reforms all tending to increase the popular welfare.

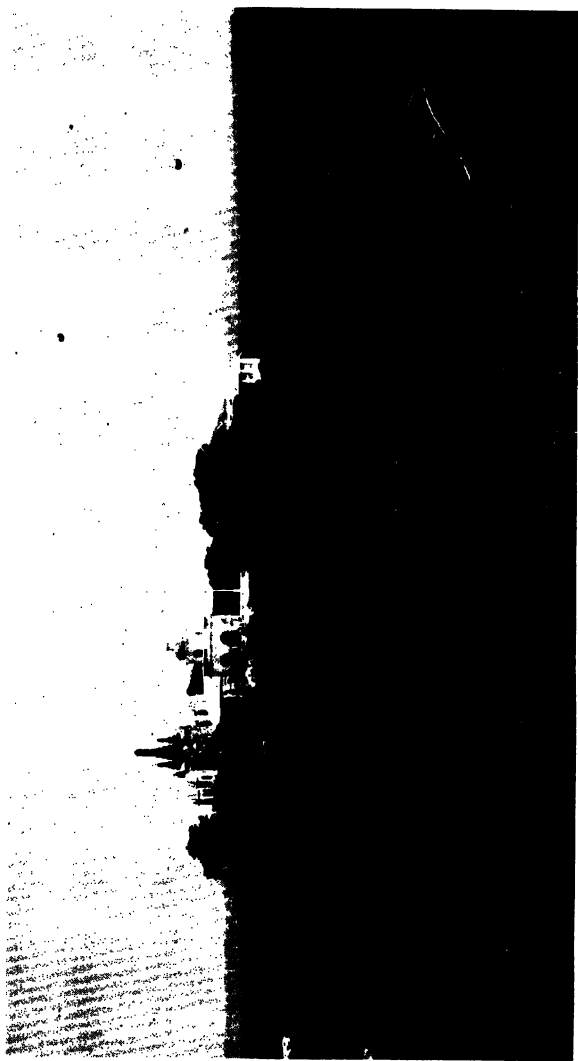
King Maha Mongkut, or Rama IV as he must now be called, did much to encourage the growth of inter-

course with the outside world, and during his reign much closer relations between Siam and the European nations were established. Both the British and the United States Governments had, some time previous to his accession, come to the conclusion that the treaties of 1826 and 1833 A.D. were no longer sufficient guarantee for their growing interests in the trade of Siam. In 1850 A.D. England had sent Sir J. Brooke to Bangkok to negotiate a more elaborate treaty and about the same time the United States deputed Mr. Ballestier to Siam with a similar object. King Rama III, however, had received the envoys with scant courtesy and had declined to alter existing relations with either country. In 1855 A.D. the fourth year of the reign of Rama IV, Sir John Bowring arrived in Siam bearing full powers from the Queen to negotiate and, if possible, to sign a new treaty between Siam and Great Britain. His reception was very different from that accorded to Sir J. Brooke. Negotiations were begun without delay and in less than a month after his arrival, during which short space of time he had completely gained the personal friendship of the King, a treaty was executed which contained many very important conditions and which, by introducing the extra-territorial system, was destined profoundly to affect the internal as well as the external affairs of the country. The treaty provided for the appointment of a British Consul to reside in Bangkok and for the exercise, by that officer, of civil and criminal jurisdiction over all British subjects in Siam. The said subjects, thus made independent of the Siamese Government and answerable for their actions to their consul alone, were given the right to buy or rent land within a belt of territory extending from four to about forty miles from the capital in all directions. Import and export duties and rates of land revenue were fixed and the rights of British merchants to travel and trade throughout the length and breadth of the land were secured.

The successful negotiation of the British Treaty drew the immediate attention of the other Powers. Similar arrangements were made with France and with the United States in the following year ; with Denmark and with the Hanseatic Towns in 1858 A.D. ; Portugal in 1859 A.D. ; Holland in 1860 A.D. ; Prussia in 1862 A.D., while Sir John Bowring was commissioned to sign treaties on behalf of Siam with Belgium, Italy, and Norway-and-Sweden in 1868 A.D. Thus King Rama IV, who found on his accession a condition of sullen unfriendliness and suspicious reserve prevailing towards all foreigners, before he died had entered into amicable relations with most of the Powers, had thrown his country open to foreign trade and intercourse, and had thereby committed it to a policy of reform, at the same time laying the sure foundation of its subsequent prosperity.

In the year 1863 A.D., Norodom, whom Siam had placed upon the throne of Kambodia, made a treaty with the French, now masters of Annam, in which he accepted French protection, and, after the traditions of ancient Further Indian politics, at almost the same time entered into an exactly similar compact with Siam. Thus both France and Siam found themselves severally pledged to protect Kambodia against any possible enemy, in return for which protection each was accorded the sole right of controlling and, in fact, dictating the foreign policy of that country. The situation thus created was absurd, and after four years of negotiation, the issue of which was awaited by King Norodom with apparent composure, Siam admitted the superior rights of France as successor to the rulers of Annam, cancelled her Kambodian treaty of 1863 A.D. and finally abandoned all claim to suzerainty over that State.

The reign of King Rama IV was almost barren of military incident. The embers of the ancient traditional feud with Burma still smouldered on



PALACE OF KING RAMA IV AT PETCHABURI.
Limestone hills in background.

the north-west frontier, and an occasional raid into the Burmese Shan State of Keng Tung from time to time fanned them into fitful flame. The arts of peace absorbed the attention of the King, the digging of canals, the construction of roads, ship-building, and the introduction of printing and the elements of education finding more favour in his eyes than the vicissitudes of war. His public life was given up to improving the condition of his country and his private leisure was chiefly passed in the study of foreign languages and in dilettante pursuits. His favourite science, astronomy, was in fact the cause of his death, for an expedition to the heights of Sam Roi Yot on the east coast of the Gulf of Siam to observe an eclipse in 1868 A.D. gave him chill from the effects of which he died in that year.

His Majesty Somdet Phra Paramindr Maha Chulalongkorn, henceforth to be known as Rama V, succeeded his father while still a minor, and for the first few years of his reign the country was under a regency. During that time the King was completing his education, begun by an English governess, by personal study on the spot, of the methods of government obtaining in Java and India. In 1873 A.D. he took up the reins of government and at once began a series of reforms which has continued, though not altogether without interruption, to the present day; affecting in turn every institution of the country and vastly improving the condition of the people. The abolition of slavery, the establishment of efficient Law Courts, radical changes in methods of revenue and rural administration, the spread of education, reform of the conditions of military service and the construction of railways were amongst the most notable reforms of the reign. Improvements in communications and the appointment of trained officials under organised control, in place of former ignorant provincial governors and chieftains of diverse races

and clans, welded the once loose agglomeration of doubtfully loyal feudatories into a nation of a homogeneity beyond the dreams of any former ruler of Siam.

The way of reform was, 'however, set thick with obstructions, and vast were the labour and patience entailed in the gradual removal thereof. The upper classes, who profited by misrule and corruption, did not see their ancient privileges slipping from them without strenuous, if secret, opposition, while for several years the work of reform was seriously interrupted by the action of the French, whose aggressive attitude at one time demanded the close attention of the King and his Ministers to the exclusion of all other matters.

Shortly after the retirement of Siam from Kambodia in favour of France, the unofficial advocates of French colonial expansion began to advance the theory that the Siamese provinces east of the River Mekông, having at one time formed part of Annam, should be restored to that kingdom, now a French Protectorate. This claim was at first ridiculed in Bangkok and unsupported in Paris, but as the desire for a Great Colonial Empire grew in France, it gained adherents, the more so because an additional argument was now put forward that the Mekông, as one of the future trade arteries of south-west China, must at all costs be seized by France. A strenuous use of propaganda at length convinced the French Government that it was really desirable to acquire all the country east of the Mekông and the "incontestable rights of Annam" were therefore officially notified to the Siamese Government. The arguments and the policy of the French with regard to the Mekông were, however, wrong in every respect. The territory in question, a part of the State of Wieng Chan, had fallen definitely into the hands of the Siamese as the result of the reduction of that State in 1824 A.D., and any Annamese

claim could only have dated from before the very ancient conquest of the provinces by Wieng Chan. Moreover, it has now been clearly proved that the River Mehkông is useless as a trade route to south-west China.

Siam replied to French demands by suggesting that the eastern provinces should be regarded as neutral territory until the frontier could be properly delimited, and this was agreed upon but resulted shortly in aggravating the trouble, either side accusing the other of violating the compact. Siam suggested arbitration which France declined, and in 1893 A.D. collisions occurred between the troops of the rivals. The bloodshed which naturally resulted, France called murder on the part of the Siamese. A fleet of French gunboats occupied the approaches to the Menam Chao Phaya, and the immediate evacuation of the debated territory, an indemnity, and other concessions were demanded and ultimately secured by a humiliating treaty dictated to, and perforce accepted by, the Siamese Government at Bangkok. To ensure the carrying out of the provisions of this treaty, France established a military occupation of Chantabun in the south-east of Siam which, however, continued long after all Siamese obligations had been fulfilled.

Even now Siam was not allowed to return to her interrupted labours of reform. The relations between the two countries were thoroughly bad, and gave rise to difficulties in the exercise of French extra-territorial rights which continually threatened further complications, and in the multiplication of which Siam beheld a grave menace to her national existence. Her whole energies were required to prevent the occurrence of unfortunate incidents, but, notwithstanding her efforts, diplomatic representations and demands for inquiries, for explanations and for reparations, accumulated until her case appeared almost desperate. Now, however, Great Britain,

jealous of the approach of France towards the eastern borders of her Indian Empire, intervened and, after lengthy negotiation, concluded an agreement with France in 1896 A.D., guaranteeing the autonomy of Siam and thus removing the fear of imminent annihilation. Thereupon Siam was free from the incubus of impending doom and King Rama V found it possible to contemplate once more the prosecution of his reforms.

With the clearing of the political atmosphere, relations with France soon began to improve. In 1897 A.D. the King spent seven months travelling in Europe, and during the course of the tour was well received in Paris. In 1899 A.D. a mission was sent to Saigon, the capital of French Indo-China, in return for which compliment the Governor-General of the colony visited Bangkok where he was royally entertained. Thereafter negotiations were opened with a view to the removal of all difficulties tending to prevent the establishment of permanent good relations, and these, after one or two abortive efforts, led to a treaty which was signed in 1904, by virtue of which Siam, in return for certain territorial concessions, obtained a mitigation of many of the worst evils of extra-territoriality and the withdrawal of the French garrison from Chantabun. Relations with the Power to the eastward continued to improve, and in 1907 a further agreement was negotiated, Siam restoring to Kambodia the province of Phra Tabong (Battambang) annexed in 1809, receiving back a part of the territory surrendered in 1904, and, a matter of far greater importance than these exchanges of territory, obtaining a recognition of Siamese jurisdiction over Asiatic French subjects. This last, as a tribute from a once bitterly hostile critic to the value of recent Siamese reforms, and as a still further lightening of the burden of extra-territoriality, was an achievement of which Siam had every reason to be proud. But it must not be forgotten that in the long-drawn-out series of diplomatic contor-

tions by which she fended off a ravenous enemy and made of him a benevolent neighbour, some 90,000 square miles of her outlying eastern territory were sacrificed.

The tribesmen of mixed Môn-Annam and Negrito stock, who inhabited the Malay Peninsula in early times, were probably regarded by the ancient Kam-bodians as forming a part of their empire. Later on, as dependents of Lakon, the same would become, in some sort, the subjects of Sukhothai-Sawankalok. There are indications in Malay history that the army of defenders which confronted that first Malay invasion of the peninsula from the islands of the south, about 1160 A.D., was raised amongst the surrounding inhabitants by the order of a "Northern Power," somewhat indefinitely translated "Siam," which seems to have been the term applied by the Malays to the people of Siam before the Ayuthia period. The rise of Malacca and the subsequent introduction of Mohammedanism early enabled the southern parts of the peninsula to establish a practical independence and, as Mohammedan settlements were gradually effected along the coasts and up the main rivers of the peninsula, the power of Siam in the far south was weakened and broken. True, it is recorded that when d'Albuquerque conquered Malacca he sent a mission to the Siamese king at Ayuthia requesting acknowledgment of his establishment of Portuguese rule, but this action was no more than the polite observance of ancient usage, and had Siam refused recognition, the result would doubtless have been the same. The action of the Portuguese conqueror constitutes the clearest evidence that Siamese sway did once upon a time extend to the most southerly parts of the peninsula.

When early in the nineteenth century the British, following in the footsteps of Malays, Portuguese and Dutch, set foot on the soil of the Malay Peninsula, Siam held the north, claimed the middle and had

finally relinquished the south, but had no definite frontier. Subsequent extension of British influence removed the last traces of Siamese authority in some of the middle Malay States, but still no properly-defined frontier existed until 1898, when a line was agreed upon which definitely separated the Siamese States from those in which British influence was paramount. Finally, in 1907, Siam, desiring to settle all questions outstanding between herself and Great Britain, and above all hoping to see the last of British extra-territoriality, opened negotiations for a treaty, one part of which would be the withdrawal of her southern frontier still further northward and the surrender to British protection of her three largest Malay Dependencies, comprising an area of about 15,000 square miles and a population not far short of one million. The negotiations continued for almost two years, at the end of which period a treaty was signed and ratified (15th July, 1909), by virtue of which Great Britain abolished her Courts in Siam and placed both her European and Asiatic subjects, with certain safeguards for their just treatment, under the laws of Siam and the jurisdiction of the Siamese Courts. She also abandoned certain claims to a right of interference with the government of the whole of Southern Siam which had been maintained for some years. On her part Siam surrendered her suzerain rights over the three Malay Dependencies above mentioned and, in order to develop what remained to her of the Peninsula, took a loan of four million sterling from the Federal Government of the British Malay States, the total sum to be expended in railway construction there.

Criticism of this Anglo-Siamese treaty was practically absent before it was ratified, though its general form was known at a comparatively early stage of the negotiations while its details were officially published a month before ratification. Afterwards, however,



H.M. KING RAMA V (CHULALONGKORN).

too late to serve any useful purpose, partisans of both sides appeared and explained at some length how they each had got the worst of the bargain. The evidence of time has failed to support either contention. Siam continues to exist quite comfortably without her three Malay Dependencies, while the surrender of extra-territoriality has brought about no ill-treatment of British subjects. If anything Siam seems to have had slightly the best of it, for the three States were not a paying proposition, while in the modification of British extra-territorial rights she certainly went far towards realising one of her most ardent national desires.

On the 23rd October, 1910, to the consternation and profound sorrow of the whole Siamese nation, His Majesty King Rama V, or Chulalongkorn as he will always affectionately be remembered, died after a brief illness. Though his age was only 57 he had occupied the throne for 42 years, during which period he led his people from an enslaved and miserable condition to one of freedom and comparative enlightenment, and guided his kingdom through many perils to a position where it has received the recognition and encouragement of the world. His Majesty displayed a devotion and a perseverance in the service of his country such as have never before been seen in the despotic ruler of an oriental state, and it is probable that his constant anxiety for the public welfare shortened his life.

At a meeting of the Council of Ministers held immediately after the death of the King, his son, the Crown Prince, H.R.H. Maha Vajiravudh, was proclaimed, the absence of all opposition or demur to the late sovereign's wish proving the popularity of the August Heir and the wisdom of the Law of Succession of 1887.

His Majesty, now Rama VI, ascended the throne under the royal style of Somdet Phra Paramindr Maha Vajiravudh Phra Mongkut Klao and, after a year of

mourning for the late king, whose body was cremated with the utmost possible expression of Brahmano-Buddhist ceremonial, was crowned at Bangkok, the date being the 2nd December, 1911. The coronation was attended by Royal Representatives from Japan, Russia, England, Sweden and Denmark, and by specially accredited envoys from most other countries of the civilised world. For the ensuing week the capital was *en fête* and a programme of banquets, balls, theatrical representations, reviews and processions entertained the Court and its guests during the intervals in the long series of rites and ceremonies with which the coronation was accomplished.

Coming after his father, King Rama VI had a difficult part to play. The edifice of State as he found it was so largely the handiwork of the late King, whose will had become so completely identified in the mind of the people with all that was absolute and right, that men who had been born and had grown to middle age under Rama V inclined instinctively to regard any possible reversal or even modification of his policy as a sort of sacrilege. When, therefore, H.R.H. the Crown Prince began as His Majesty the King to put into execution ideas not in conformity with those of his father but the inevitable results of residence in Europe followed by a long period of watching at home in enforced abstention from all participation in government, there arose a certain amount of criticism from those who believed without thinking that any change must be for the worse. The feeling culminated in a half-hearted conspiracy which was discovered and nipped in the bud and soon the people began to realise that the ways of their beloved Chulalongkorn were not necessarily the only ways, whereupon the ship of state resumed an even keel.

Social development and foreign policy occupied much of the attention of the King during the earlier years of the reign. Revision of treaties with European

Powers, with escape from the slur of extra-territoriality, was still the chief national ambition and in 1912 Denmark followed the example set by the British Empire and accepted Siamese jurisdiction for all her subjects living in Siam.

When the great war broke out in 1914, Siam remained neutral and indications were not wanting that, so far at least as the populace was concerned, the country inclined to the side of the Central European Powers. The reasons for this are not far to seek. The younger generations of Siamese had imbibed suspicion of the French with their mothers' milk and had grown up in the fixed idea of France as the enemy of Siam, while the natural feeling of dislike which the Siamese have for all foreigners had quite recently been increased to something more acute towards the British by the "rectification" of the Anglo-Siamese frontier in the Malay Peninsula with its attendant diminution of Siamese territory.

The King, however, and the more discerning of his statesmen were never deceived as to the ultimate result of the war, and, by a carefully-conducted campaign of instruction and persuasion, were able to bring the country round to so proper a view of things that when, in July, 1917, Siam threw off neutrality and declared war against Germany, practically the whole of the community felt convinced that the step was a right one. It is needless to say that those few who had not been so convinced remained very carefully silent after the die had been cast.

In April 1918, an Expeditionary Force composed of upwards of a thousand volunteers, left for France, where until the end of the war it conducted itself satisfactorily, though its performances were confined to transport-driving and the work of aviation mechanics, hospital details and so forth.

The return of these volunteers in 1919 was the signal for an outburst of national feeling the expression

of which by rejoicings and festivities completed the conversion of the public wholeheartedly to the side of the Allies.

The material gains resulting to Siam from her action in joining the Allies were considerable. German shipping to the value of several millions sterling fell into her hands and was condemned as prize to the Crown, and she was enabled to cast loose the strong if undefined hold that Germany had assumed, and maintained for years over the greater part of her railway system. Last, but not least, she achieved a further step towards that place in the Community of Nations which has for so long been her dearest wish.

In 1922 the United States of America entered into a new Treaty with Siam abandoning all extra-territorial rights and accepting Siamese jurisdiction over American subjects in Siam. Nothing was asked in exchange for this surrender which was made simply as a matter of right and in recognition of Siam's recent administrative achievements.

SOCIAL ORGANISATION.

His Majesty King Rama IV (1851-1868), though he passed a great part of his life in the celibacy of the monkhood, had a large family after he ascended the throne. Of considerable intellectual attainments himself, he devoted much thought to the education of his sons and though he died before any of them had fully grown to manhood, their instruction, continued under the auspices of their brother who succeeded to the throne, was thoroughly carried out, with the result that on reaching man's estate many of them were well fitted to share in the duties of government, they being in fact the best educated family in the kingdom.

Upon the education of the young Prince Chulalongkorn, his father bestowed especial care. At an early age he was provided with an English governess by which arrangement the child was secluded from such court influences as might have proved injurious in the formation of his character, with the result that when his royal father died and, at the early age of fifteen years Chulalongkorn was called upon to ascend the throne, he did so in the possession of a sound, if elementary, education and with a perception of the duties of his position until then entirely unknown in the history of his country. The years of his minority were passed in the pursuit of knowledge, in the consideration of the condition of his native land, and in study on the spot of the methods of government obtaining in neighbouring countries. Shortly after his return from foreign travel he assumed the full responsibilities of government and inaugurated the series of reforms of which the end is not yet.

In accordance with the usage of his country, King Chulalongkorn, or Rama V, was married very early in life, and before he had reached the age of five

and twenty had a numerous family already growing up 'around him. His Majesty bestowed a care upon the education of his children even greater than his father had done. Tutors and governesses, both Siamese and English, were engaged for them while they were very young and the princes as they grew older were sent to school in Europe. At first they all went to England but latterly some were sent to Germany, Russia, and other countries. In England they usually started at a public school and from there went on either to one of the universities or to some technical institution where they could receive instruction in the particular subject selected for each one as his speciality. Guided by a little pamphlet of warning and counsel written by the King, a model of what a father's advice to his sons should be, the princes nearly all did extraordinarily well. Law, engineering, agriculture, are some of the subjects in which they specialized, while several of them, after passing successful examinations, entered the British, Russian, German and Danish armies, and the British navy, and thus gained experience in the different branches of the profession of arms.

In the year 1887 a very ancient law had been resuscitated which provided for the appointment of an heir-apparent, or Crown Prince, to the throne by each sovereign during his reign, thereby fixing the succession, which had for some centuries been a matter of much ambiguity and a perennial source of danger to the public tranquillity. The first prince to occupy this exalted position died in 1895, and was succeeded by a half-brother, now His Majesty Rama VI, at that time a boy pursuing his education in England. The Crown Prince after a brilliant career at a public school, at a university and in the British army, travelled over the greater part of the world studying men and manners and diplomacy, and returned to Siam in 1902, from which time onward His Royal Highness filled the rôle

of Second Personage in the State until, eight years later, he was called to assume the dignities and grave responsibilities of the throne.

There are many sayings current amongst foreigners illustrative of the large number of princes in Siam and the royal family is certainly a very large one. The title "Prince," as applied collectively to all its members, has no parallel in Siamese except perhaps in the term *Chao Nai* meaning "Chief," employed to express colloquially a "Royalty." The titles of the individuals are many, and by them the actual rank of the holders is at once distinguishable. The sons and daughters of the king and of the queen, or queens, are born with the title *Somdet Chao Fa* while those of the king and of ladies who are not queens are *Phra Ong Chao*. The children of *Chao Fa* and *Phra Ong Chao* are *Mom Chao*, their children being *Mom Racha Wongs*, the next generation *Mom Luang* and the next are without title of any sort.

His Majesty King Rama VI, much to the sorrow of his people, remained entirely celibate until he had reached the age of forty years, a circumstance which, hitherto unknown and undreamed of in the annals of Siamese history, was regarded by the people as a national calamity. The popular anxiety was relieved when, in 1920, the intention of his Majesty to marry was officially made known, and his espousal in 1922 to a lady of exalted condition and many accomplishments was received with universal joy and approval.

Princes of the rank of *Chao Fa* and *Phra Ong Chao*, on attaining manhood may be given official rank as *Krom Phaya*, *Krom Phra*, *Krom Luang*, *Krom Khun* and *Krom Mun*, of which the first is the highest. Formerly there was very seldom a holder of the titles *Krom Phaya* and *Krom Phra*, while of the other three there were not more than four of each in existence at any one time, the twelve princes so distinguished, and no others, occupying official positions in the king's

service. Now, however, things are different, there being at present one *Krom Phaya*, five *Krom Phra*, seven *Krom Luang*, seven *Krom Khun* and nine *Krom Mun*, while, moreover, many other members of the royal family occupy positions under Government in the military and civil services which, by reason of their superior education, they usually fill with distinction and success.

Those who are born *Mom Chao* do not as a rule receive any other title, but individuals from among them may be created *Phra Ong Chao*. The Princes now holding this latter rank include several children of *Somdet Chao Fa* princes, promoted from *Mom Chao* at birth, and a few others promoted in later life. The grades below *Mon Chao* hardly count as royalties and frequently drop their titles or exchange them for those attached to ordinary official positions usually filled by persons who are not royal. A prince who is by birth *Phra Ong Chao* or higher, is addressed in English as "Royal Highness"; if *Phra Ong Chao* by creation, as "Highness"; and if *Mom Chao*, as "Serene Highness."

By far the most important factor in the social organisation of Siam is the absolutism of the monarchy, an absolutism which, though outwardly modified by the constitution decreed in 1874, and veiled behind that consideration for his subjects which is His Majesty's chief concern, is as complete in spirit to-day as it was in the darkest period of tyrannical oppression which the nation has ever endured. The monarchy demands now, as it has always done, the most complete submission of the entire people not only to every decree issued by the king but, in theory, to his lightest whim or caprice, and the hereditary instincts of the race prompt it to render such obedience without question and without resentment, no matter what sufferings such obedience might conceivably entail. This state of affairs doubtless had its origin in the fact

that the kings of the remote past found their greatest safety in exciting the fears of their subjects, any show of more gentle methods being almost invariably taken for a sign of weakness and as a signal for unrest and rebellion. Writing of Siam at the end of the seventeenth century, De la Loubère cites instances of the extraordinary cruelties practised by the king for the sole purpose of instilling fear into the hearts of his people, and mentions also the incapacity of the people themselves to imagine a stable government based upon any other foundation.

It is only natural that out of the habit of fear and obedience so carefully fostered, an instinct of profound deference to all authority should have grown up, and that, although in the actual presence of the sovereign all persons were equally of no account, a many-graded social organisation should have been evolved. There was no such thing as an hereditary nobility in the land, even the descendants of Majesty becoming merged in the people at the fifth generation, but those about the Court and officials of the Government, from the highest to the lowest grades, held titles by virtue of their offices and constituted a sort of aristocracy, from which however, they could at any moment be expelled at the royal pleasure. Any person could aspire to the highest official dignity, but it was usual for the sons of those who had held high rank to be selected for preferment. The members of this society, while tendering the utmost respect and obedience to those above them, exacted an equal consideration from all those below, and there thus existed a sort of social pyramid round the base of which knelt a submissive populace while upon its slippery sides a throng of anxious courtiers precariously maintained itself, each individual engaged in rendering homage to those above him and to the king at the apex of all.

The entire nation, including the official nobility and the lower orders, was divided into two parts, the

leaders and high officials of which occupied places at court on the right or left of the throne respectively. One section included all the military forces and the other all the civilian officers and their dependants. There was sometimes also a queen of the right and a queen of the left. Those who occupied the right side of the audience chamber, to the left of the king seated opposite them, were called Officials of the Right. The others were called the Officials of the Left. The right was considered the more honourable side and where persons of equal rank were concerned those of the right took precedence.

The highest official persons in the realm were the *Uparat*, or *Wang Na*, who may be described as the Deputy of the King, the *Wang Lang*, a sort of royal secretary and six Chief Ministers whose titles were, *Chakkri*, *Wang* (or *Thorama*), *Bholadeb*, *Phra Klang*, *Kalahom* and *Yomarat*. The first two were always Princes and the others appear to have been sometimes royal but usually not, their rank being in ancient times *Ocyā* an old form of *Phaya* and later *Chao Phaya* or even occasionally *Somdet Chao Phaya*. In close attendance on the King were the members of the corps of Royal Pages or *Mahatlek*, recruited from the families of the high officials and usually marked out for preferment unless they should prove unworthy. The numerous functions of the court were attended by crowds of titled officials of all grades but, apart from these occasions, there was little social intercourse amongst them, since a social disposition and any reputation for the cultivation of a wide circle of friends infallibly brought upon the person so inclined the jealousy and dislike of the king. A noticeable trait of the national character was the merciless snubbing and ostracising by the whole community of any individual so unfortunate as to incur the sovereign's displeasure.

By very ancient custom, once common to all Further

India and to parts of India and China also, not only was all land in the kingdom the actual property of the crown but every human being living within the frontiers of the state was considered a mere chattel of the king, who had absolute right to dispose of the person, property or life of all such in any manner that might seem best to him. Long ago, when communities were small, the ruler exercised his right by demanding personal service from each man for a certain part of each year. Later, when the small independent clans grew, and became united into settled kingdoms, various modifications were introduced for the exploiting of this great reserve of labour to the better advantage and profit of the Crown, and in Siam modifications took the form of a complicated division of the people into *Lake* or Departments of the Public Service.

A considerable part of the nation was comprised in the *Lake Sui*, the members of which were exempted from actual personal service but were obliged to contribute a part of the produce of their private labour for the support of royalty, such contribution taking the form of timber, lime, woodoil, beeswax, eaglewood, resin, as well as rice, pepper and all kinds of agricultural produce which, at the time when the Sovereign monopolised the export trade of the country, was stored in great warehouses pending sale to foreign traders or export in the king's ships. The wealthier members of the *Lake Sui* could, however, substitute money for produce and as time passed and the trading monopolies came to be farmed out, this form of payment became very general.

The majority of the people, however, belonged to the division from which actual service or *corvée* labour was required, the division which had originally included the whole adult male population. These were called *Prai*, a word which has probably the same origin as "Paik" by which, according to Sir G. Grierson, the

Ahoms of Assam, a branch of the Lao-Tai and therefore relations of the Siamese, designated the individuals forming the rank and file of their *corvée* system, which very closely resembled that of Siam. The sons of *Prai* were themselves *Prai* and the force was further recruited by the addition of war captives, criminals from the other *Lake*, and the slaves and servants of deceased princes and nobles, who all became *Prai* on the death of their master. From the *Prai* the standing army, the Palace Guards, the sailors of the Royal Navy and menials of other public services were drawn, while it also supplied labour for all manner of public works. The fee payable by *Prai* for exemption from service was 17 ticals per year, and as few of the people could pay this sum there were usually many more workmen available than the king had any use for. The *Prai* were collected in parties, or *wane*, a word meaning "in turn" or "in rotation," at different centres all over the country where, under the supervision of an official, they were put to such work as could be devised in the interests of the State. It is almost needless to say that their labours were, however, more commonly in the interests of their supervisors. The *Prai* were exempted from the payment of ordinary revenue up to a limit of 6 ticals. No escape from the condition of *Prai* was possible, the status being hereditary. In time of war all *Lake*, whether *Prai* or *Sui* were liable for military service.

A great many modifications were by degrees brought to affect this system. Thus large numbers of people were allotted to the different members of the royal family and to the high officers of state, the recipient undertaking to be responsible to the king for payments made by them and, in the case of *Prai*, for their work, an arrangement which naturally led to much confusion. Exemptions, partial or complete, from liabilities to the king were also allowed to the *Prai* and *Sui* of many of the princes and officials, another custom which con-

duced to many irregularities. No machinery existed for the effective control of the system, the officials entrusted with its management were paid only a small retaining fee and consequently derived the greater part of their income from the diversion of the labour or money of the people in their charge to their own private uses, and thus, while the country continued to suffer all the inconveniences and hardships of the system, the benefit accruing to the Crown therefrom grew continually less. It was customary to tattoo the arms of all *Prai* and *Sui* as soon as the individuals were old enough to render service and each *Lake* had its own peculiar mark by which its members were distinguishable. Any youth found without a mark could be forced to become *Prai*, no matter what *Lake* his father belonged to, unless he were specially exempted. All holders of official positions, with their families were exempt from *Lake*.

At the very bottom of the social system stood the slaves, consisting of such war captives as were given away by the king instead of being made ordinary *Prai*; of those who, as children, had been sold out and out by their parents, a fairly numerous class; and of debt slaves or persons who had pawned themselves and perhaps also their families for the loan of a sum of money down. The first two were bound for ever, they and their children, but debt slaves could obtain release on repayment of the sum advanced. For permanent slaves there was a fixed tariff of prices at which they could be sold at any time and debt slaves could always be transferred to any person willing to pay the price for which they had been pawned. The owners of debt slaves who also belonged to the *Prai* or *Sui*, were responsible to the Crown for the labour or money due from them. The condition of slavery was not hard, provided the slaves were fairly tractable and did not try to run away. They

were rarely sold without their own consent, and the young slave children, brought up in the family to which they belonged, were usually treated with much the same consideration as the free children of the household. Moreover, if a debt slave were unhappy he could transfer himself to another master by 'prevailing upon the latter to pay the sum in which he stood indebted.

Such was the organisation of society in old Siam. King Rama IV was the first sovereign to recognise clearly that, however suitable such an organisation might have been to a kingdom and people cut off to all intents and purposes from the outer world, and sheltered from foreign criticism and from the movements towards individual freedom which seventy years ago had already made themselves strongly felt amongst most civilised peoples ; they would certainly not do for the times that he saw coming for Siam. He realised that the day of foreign incursion into Siam was dawning, that he was powerless to avert it even if he wished to do so ; and that, apart altogether from altruistic reasons, it was advisable to set his house in order and prepare his people for the assimilation of new social conditions. He died, however, before he had time to do more than break ground, and left the task to his son who, during his long reign, laid the foundations and erected the structure of a new social edifice that it has been the faithful object of His Majesty King Rama VI to complete and embellish. Thus slavery has disappeared, the sale of children has long been a thing of the past, the compulsory services of *Prai* and *Sui* have gone with the introduction of sound military laws and a properly regulated Poll-tax, the public gambling houses have been abolished and the rapacity of the money-lenders has been curbed. By these measures the social conditions of lower class life have been totally changed, so that instead of a servile and pauperised peasantry whose faces were

for ever being ground, there is now growing up a sturdy and independent class free from the ancient thralldom, owning its own land, depositing money in the savings banks, in fact, acquiring a stake in the country and giving evidence of the beginnings of coherent thought of its own.

Amongst the higher or official classes also, the social changes of recent years have been most marked. While the absolutism of the monarchy remains unabated and the sanctity of the persons of princes is still accepted, the advance of education and the spread of culture, assisted by the liberal views and acts of Rama VI and his father, have combined to make the social life of the middle and upper class something quite different from what it was in the first half of the nineteenth century.

The early efforts of King Rama V (Chulalongkorn) to introduce new social ideas were fraught with considerable difficulty and not a little danger. The most powerful nobles, and especially their women-kind, were naturally interested in the preservation of the old order on which their innumerable privileges were based, and such was the strength of the true oriental conservative instinct amongst all classes that any too sudden or too drastic innovation might have resulted in a reactionary upheaval altogether subversive of progress. It was therefore necessary to proceed with the utmost wariness and circumspection, the more so as the King had no intention of coercing his people by the old method of fear-inspiring tyranny, but had early determined that his reign should be marked by the growth of an affection and a voluntary feeling of loyalty towards the Sovereign, which had hitherto found little or no place in the domestic politics of the State. Some years were required to persuade the small group of more intelligent men who stood near the throne and on whom he must rely for assistance in

carrying out his wishes, that whatever reforms might be undertaken, it was no part of His Majesty's policy to cause a wholesale introduction of western customs, but that his ambition was to endow his people with such enlightenment as should prove conducive to their welfare while at the same time preserving all Siamese customs which were not incompatible with improvement in social conditions. It may here be said that this ambition has ever since been the guiding star of the Crown and, after many misunderstandings, has come at last to be recognised. The people now realize that His Majesty King Rama VI is indeed passionately attached to the traditions of his country, that his intention in pursuing western methods is only to adopt such foreign customs as may contribute to the happiness and material welfare of his people, and that the very last thing he desires is to see the nation divest itself of its own ideals in favour of that veneer of so-called civilisation which has upset the national equilibrium and subverted the morals of more than one Eastern race.

A far-reaching social reform was effected when it was decreed that bodily prostration in the presence of the Sovereign, always hitherto absolutely insisted upon, no matter what the rank of the subject, should no longer form part of official etiquette. With this decree disappeared in a great measure the physical exhibition of profound submission which every person of any position demanded from all those below him in social status, an exhibition which had aroused the contempt of foreigners and which was certainly incompatible with the aspiration of the Siamese to the appellation of "The Free." An impetus to social intercourse resulted from this change of manners, for the abandonment of the physical attitude of humility (any neglect of which by an inferior towards a superior had formerly been considered rudeness and

presumption) by enabling persons of slightly different rank to meet on a more or less equal footing, naturally led to an easier interchange of ideas and sentiments, though superiority of position continues to be fully recognised in the forms of speech and in other little ways.

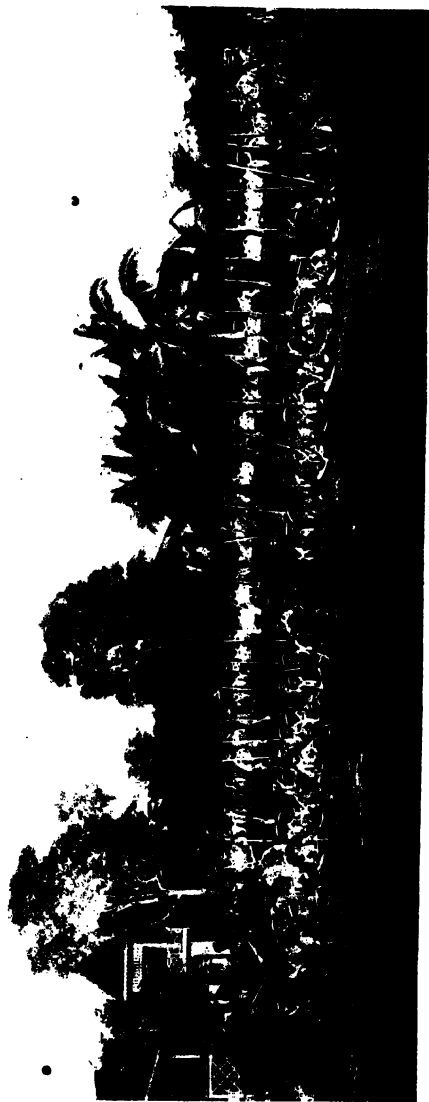
The distrust resulting from continual fear of intrigue which caused former rulers to look askance upon any development of social intercourse, has in great measure disappeared and the men of the upper classes can now pass their leisure in social gatherings and at clubs where the free discussion of all subjects is permitted. In King Chulalongkorn's time, however, development in this direction was erratic. Those who had never been out of the country had not the faintest trace of any true gregarious spirit, while to the few who had spent a few years in acquiring European enlightenment, club life was too often represented by the billiard saloons or public houses of West Kensington and Bayswater. The taste for sports and games was still embryonic, while the idea of communal intellectual pursuits had not yet been conceived. King Rama VI, with the opportunities afforded by his life as Crown Prince, did not fail to see where lay the weakness in his Royal Father's endeavours to create a social spirit ; and how, in the absence of incentive, people remained inert and inwardly unresponsive to every endeavour, and no sooner had he come to the throne than he went straight to the root of the matter.

Long ago when wars were frequent, members of the upper class who voluntarily took up arms joined one or other of two bodies of irregular troops called " Wild Tigers " and " Wild Cats " ; corps noted for dash and bravery, the members enjoying many privileges, and the tale of whose exploits has been handed down in many a page of Siamese history. His Majesty thought that in resuscitating this ancient and

honourable order, and by grafting upon it the excellent precepts and discipline that form the mainspring of the present day Boy Scout movement, he could create the incentive necessary to arouse the official classes from their condition of chronic lethargy, and might induce in them a state of mind suitable for the assimilation of the sense of self-restraint, discipline, loyalty and other manly virtues of which they were so largely ignorant.

He therefore founded that remarkable Siamese institution called the "Wild Tiger Scout Corps," which, starting with the enrolment of two or three hundred volunteers from amongst the civilian officials of Bangkok, now numbers over 10,000 and contains within its ranks practically every officer of the civil government of the country. His Majesty is the Chief Scout-General of the Corps and each High Commissioner is the head of the detachment comprising the officials and other volunteers of his administrative Circle. At first the uniform was a copy in black of the dress of the European Boy Scout, and no arms but a heavy sheath knife were carried, but by degrees many changes have been imported. The ordinary battalions now wear khaki, the officers closely copying the British service uniform, while the special detachments, of which there are many, appear in green, blue, grey, black and other colours. A part of the force is mounted and carries lances, and in 1920 the whole was armed with rifles purchased by public subscription.

In the early days of the movement His Majesty gave much of his time to it, personally conducting parades, and lecturing on social duty at the commodious clubhouse presented by him to the force. At that time drilling was practically incessant and the "Tigers" found life somewhat of a burden; but when a certain spirit of passive resistance had been broken and the reason of the matter had begun to take hold, a gradual



"TIGER'S WHELPS" (BOY SCOUTS).

relaxation was allowed and the quasi-military exercises were reduced to a weekly parade, an occasional rally and an annual fortnight of manoeuvres. Meanwhile the "Tiger" club in Bangkok and at every provincial headquarters has become a centre where the members meet regularly for tennis, billiards and other social diversions, as well as for disciplinary exercises.

Affiliated to the "Wild Tigers" are innumerable companies of Boy Scouts recruited from the schools and known as "Tiger's Whelps." These wear the usual boy scout uniform. They swarm in Bangkok and in all the country towns, appear very keen on their work and undoubtedly derive immense benefit from the drilling and scouting to which they are subjected and from the wholesome precepts with which they are freely dosed.

The next inducement to be made use of by the King in the awakening of the people was the game of football. The game had already been introduced by English schoolmasters and was played by most boys as part of their school curriculum. His Majesty made the game for a time his chief interest, organised cup ties and attended all the matches. A considerable enthusiasm soon arose, clubs were formed everywhere, the whole youth of the country gave itself to the game and, by the end of the second season, the enormous crowds of people of every age and rank, shouting themselves hoarse and sometimes breaking the ropes even in the presence of royalty, showed conclusively the entire success of this device for dispelling the erstwhile prevailing apathy.

To Europeans the possession of a family name is so much a matter of course that they are perhaps apt to overlook the immense social importance of the institution. In Siam the family name did not exist when King Rama VI came to the throne. Each individual had his personal name and by that only

was he known, unless he received a title, and there was nothing to connect him with any other person in the minds of any except those who happened to be his intimates. A Siamese man, were he so inclined, could therefore very easily evade family responsibilities, and the ordinary obligations of kith and kin, when unsupported by natural affection, had little or no hold upon him.

In the year 1916 the King decreed that all persons should have a patronymic, and proceeded to bestow names on such individuals as applied for one. The people, at first rather sceptical as to the advantages of this innovation, soon came to see the general desirability for it, and before long a large number of applications had been received. In selecting names, family history, the exploits of a known ancestor, or the district of which the applicant is a native, are taken into account so that most of the new names start with a family tradition of some sort.

At the present day the court is still the chief centre of social life, and any person of high standing who may have forfeited the privilege of appearing at the official, religious, or social court functions which are very numerous, probably soon finds himself without friends. The Corps of Royal Pages, an extremely well-organised institution, is regarded as the royal road to advancement. After many changes the tradition of the right and left services survives in the actual positions occupied by the high officials in the throne-room, and in a few of the titles of those whose duties keep them immediately about the person of Royalty, but elsewhere the distinction has lost its originally high importance.

The changes that recent years have wrought in the position of Siamese women of the middle and upper classes are so remarkable as to demand very special consideration. Whilst the women of the lower orders

have always enjoyed absolute freedom, appearing in public at all times and participating with the men in all the business and pleasures of life, the ladies of the upper class were formerly kept considerably in the background, seldom appearing at private social gatherings of any but the most intimate kind and never on any account at public or official functions. The fact that King Rama V (Chulalongkorn) and his predecessor maintained very large female households may have had something to do with the restriction of the liberty of upper class women but, whatever the cause may have been, it has most certainly ceased to operate. From the moment of his accession His Majesty King Rama VI seems to have given this important matter his close attention, for in the court functions and ceremonies that signalised the coronation in 1911, the ladies of the upper classes found themselves taking part to an extent that took their own breath away and astonished the public. There followed a rapid development of female education, and from then onwards it has become more and more the rule for at least one or two of the daughters of the best families to be sent to finishing schools in Europe. By his general attitude towards the woman question King Rama VI has made it plain that he would favour the disappearance of the practice of polygamy. By elaborating the ritual he has given the marriage ceremony more importance than it formerly had and has made the assumption of the married state a more serious matter, at least in appearance, than it was. Early in his reign he drafted an Act providing for the compulsory registration of all existing and future marriages which, since it prohibited registration of any marriage, either of the parties to which was already party to another registered and existing marriage, and declared the offspring of an unregistered marriage to be illegitimate, was clearly a deliberate thrust at a custom sanctified

by immemorial usage and acquiesced in by both Church and State. A strong passive resistance was opposed to the measure, the elder women of the upper class proving, strangely enough, the most obstinate reactionaries, and the King, finding the time not yet ripe for so drastic an innovation, consigned the draft to a pigeonhole to await further developments.

With all this change in habits and status, the costume of the ladies has changed no less. Long hair and white teeth, only a short while ago considered to be a sort of proclamation of easy virtue, are now permanently established as not only proper but essential for, at any rate, the younger women, while, at the time the betrothal of His Majesty was announced, it was also made known that the King wished the women of his country to discard the national *panung* or waist cloth in favour of the *Sin*, the tight skirt of their Lao cousins, a garment hitherto worn by Siamese ladies only as the extreme of *négligée*. By a process of development that was to be expected, the *Sin* has given place to the European skirt. Whether this change will be permanent or not is uncertain, but at the receptions and parties that followed the royal betrothal it was given trial by the Court ladies and by other intrepid spirits and, for the moment at any rate, it appears to be the accepted fashion for upper class girls. Thus attired, with elaborate coiffure in European style, with modestly décolleté neck, manicured fingers, and cheeks just touched with rouge, the tango-dancing, self-assured Siamese young lady of to-day presents a rather startling picture to those who remember her a shy and awkward little bifurcated creature, apparently quite unversed in those arts the exercise of which makes the right and proper interest of most women's lives.

Although a great deal has been accomplished in the

way of social reorganisation, and the condition of the Siamese as a nation has very much improved, more especially during the last fifteen years or so, it must not be thought that the regeneration is an accomplished fact and that the people are now, all at once, freed from the incubus of those curious customs which have weighed upon them and prevented all proper social development for so many generations. To decree a change in habits and manner of thought, and to bring that same decree into universal acceptance and practice, are two very different things. Prejudice and privilege have fought against every step, and have found many ways, without open conflict or flat disobedience, of opposing the royal will and of obstructing, if not altogether frustrating, its intentions. The ignorance of the lower orders causes them to realise but slowly the advantages of freedom and the power which they have of asserting their newly-given right to the same, and hence many old abuses still continue. The leaven is working, however; every year sees an advance of some sort along the path of social development, and unless a severe reaction sets in, which there appears no reason to fear, the emancipation of the nation is now only a matter of time.

Several Orders have been instituted since the beginning of the reign of King Rama IV as marks of distinction and rewards for faithful and diligent service to the Crown. The oldest of these is the Most Ancient Order of the Nine Gems, first conferred in 1851 A.D. and restricted by its statutes to persons of the Buddhist religion. The next was the Most Exalted Order of the White Elephant, founded in 1861 and consisting of five classes, subsequently extended by statute to a special highest degree conferred only on persons of royal descent, and seven classes, the insignia being a star and badge with a white elephant on a ground of dark red enamel, red riband for the special

first class and red with green and yellow edging for the others.

The first order instituted by King Rama V was the Most Honourable Order of the Crown of Siam, founded in 1869, the year after the death of King Rama IV. This contained five classes, afterwards extended by statute to one special and seven ordinary. The star and badge of the insignia contain a Siamese crown on a ground of dark blue enamel, the riband of the special first class is blue and that of the others is blue with red and green edging. At the end of the King's minority, in 1873, the Most Noble Order of Chula Chom Klao was founded. The star of this order contains the initials of King Rama V, and the badge his effigy enamelled in natural colours, on a pink ground; the riband is rose colour. The order, which has three classes, is usually restricted to Siamese of noble rank, but foreigners of royal and noble birth, or otherwise distinguished, may be enrolled as honorary members. There is a branch of the order in four classes reserved for Siamese ladies of high station. The Order of Chula Chom Klao takes precedence of the Orders of the White Elephant and the Crown. The third order of His Majesty King Rama V is the Most Illustrious Order of the House of Chakkri which was instituted in the year 1882 and takes precedence of all the others. It consists of one class only and is restricted to princes and princesses of the royal family of Siam, foreign sovereigns and princes being admissible as honorary members. The riband of the order is yellow.

The orders of King Rama VI are several. The Ratna Varaborn and Vajira Mala Orders of Merit were founded in 1911 and are reserved for Siamese only. These consist of one class only, the former a star worn round the neck and the latter a badge worn on the breast. In the year 1918 the Honourable Order of Rama was founded for Military and Naval

services. It consists of five classes with star and badge, and ribbon of dark blue, and takes precedence of the Orders of the White Elephant and the Crown, coming directly after the Chula Chom Klao. In 1919 His Majesty instituted a single class order called the Vallababorn, the emblem of which is a badge worn on the breast.

All the orders are highly honoured and very much prized. The White Elephant and the Crown are those usually conferred on Europeans.

EDUCATION

The question of education is very closely interwoven with that of social reform. Indeed it may be said that the neglect of education in the past has proved one of the great obstacles to the improvement of social conditions, while the evils of those conditions have at the same time been the chief causes of the neglect of education. It is only within the last twenty years, however, that these facts have obtained partial recognition and that efforts have been made to supply the general public with opportunities for obtaining more than the most elementary instruction, and it has scarcely yet been realised that social changes have made it to some extent possible to obtain, by learning, that worldly advancement which was formerly dependent upon interest or the merest luck.

Ever since the establishment of Buddhism in the country, a certain amount of instruction has been available to the public in the monasteries where the monks, while cultivating a knowledge of the Pali language, the Scriptures and other subjects sometimes deep but seldom of much practical value, also taught the male population reading, writing and arithmetic in their most elementary forms. The foreign missionaries were, however, the pioneers in Siam of education in the usual acceptation of the term, but the scope of their labours was much confined until the accession of King Rama IV, who, having himself acquired considerable learning from the American Presbyterians, placed many facilities in their way and encouraged his people, so far as he could without derogation of the national religion, to take advantage of the opportunities offered by these worthies. Secular schools were also established by private enterprise in Bangkok

during that reign, but the instruction imparted in them was very little less rudimentary than that given by the monks. It was about this time, also, that the practice of sending boys to foreign countries to be educated was instituted, with the object of securing for princes and youths of the higher class an acquaintance with the outside world, and a general education of a quality which could not be obtained anywhere in Siam. In time the number of boys thus sent abroad increased considerably, and technical training was provided in addition to general education, by which it was hoped that specialists would be obtained, capable of managing various departments of government and of imparting their knowledge to the youth of the country. The selection of students for foreign instruction was, however, lacking in system, and it cannot be said that the scheme, as at first carried out, was successful, for, though the youths proved themselves to the full as intelligent as the English boys with whom they came in contact, some of them acquired expensive and vicious tastes which proved their ruin on their return home, while others failed, from one cause or another, to make any use of their special knowledge in after life.

In the year 1891 H.R.H. Prince Damrong, whose name will be found intimately associated with practically every reform of King Rama V, was sent on a mission to Europe to study the question of education, and, on his return, a Government Department of Education was inaugurated which a little later became the Ministry of Public Instruction. The late Sir Robert Morant, then acting as tutor to the Crown Prince, was associated with Prince Damrong in this important work, and to their joint labours is to be attributed the scheme of national instruction which the Ministry of Public Instruction has ever since been trying to carry out and develop.

The first object of the new scheme was the provision of a sound elementary or primary education which should be placed within the grasp of everybody in the country and which should serve as a foundation for secondary and higher courses. The absence of textbooks in the native language presented to Siam the same serious problem which had faced Japan in her early years of development, and involved the necessity of adopting a European language and of teaching the same as a medium through which higher education might be acquired. Tradition and association clearly indicated English as the language best suited to perform this part and it was therefore arranged that the secondary education to be provided by the State should consist of two branches, one a course in Siamese by which youths could be equipped for the ordinary business of life, and the other a five years' course in English as a preliminary to the scientific study of some special subject. Further aims of the new Department were the provision of high class schools for the education of the children of the princes and nobility and the foundation of colleges for the training of teachers.

But although thus provided with an excellent scheme, the Department of Education languished during the first years of its existence. Other pressing needs of the State demanded, and for a time absorbed, the energies of Prince Damrong while his English coadjutor left the service of the country, and it was not until rapid development of many branches of the administration revealed an extreme poverty in the matter of competent men required for every grade of the Public Service that serious attention was once more directed to this most important question. Since then, however, the progress of the Department has been fair. In Bangkok at first, and subsequently in the interior, many lower primary schools were opened, the majority of which, by a wise arrangement, were

founded upon the old temple schools of the Buddhist system with the monks as teachers. Boarding schools for the sons and daughters of the nobility were inaugurated with staffs of qualified English teachers. Primary and Secondary Schools with mixed Siamese and English teachers were started in the Capital, and the training college for teachers, to which a second was subsequently added, became filled with students both cleric and lay. Meanwhile the Medical schools were developed and enlarged and in course of time many other technical institutions, such as the Law, Military, Civil Service, Engineering, Survey, and Agricultural schools, were opened, though most of these were not directly under the Department of Public Instruction.

At the present day the number of pupils receiving an elementary education in the monastery, and small private secular, schools is estimated at over 250,000 ; the Government Primary schools provide education for 38,500 pupils and the Secondary and special schools over 11,000.

The education given by the monastery schools does not extend beyond reading, writing and the rudiments of arithmetic, the primary schools go a little further, and secondary schools proceed by standards to a good general education, including a fair working knowledge of English. The number of schools administered by the Department of Education in all parts of the country exceeds 550.

There are three schools under direct Royal patronage, known as the Royal Pages Colleges, which receive the sons of the nobility and higher officials as day boys and as weekly or full boarders. The curriculum of these differs slightly from that of the schools under the Department of Education and aims at the preparation of the gilded youth of the nation for careers in the services attached to the Court and in the higher branches of the administration. One of them is situated

at Chiang Mai and makes a speciality of the education of the sons of the Lao aristocracy. The pupils of all three wear the uniform of cadets of the Royal Household.

In 1917 was founded the "Chulalongkorn University," in which the special schools of Administration, Engineering, Medicine and Literature and Science have been incorporated as faculties. A large area of land has been set apart for this purpose to the eastward of Bangkok city, and handsome university buildings have been erected with professional residences and extensive playing fields. So far, however, the University has not proved much of a success, and it is doubtful whether the special schools did not obtain better results in their earlier and more modest form of organisation. This matter was undertaken entirely without foreign assistance, and practically no error into which ignorance and inexperience can fall has been avoided, but it may be presumed that, as time brings wisdom, mistakes will be recognised and corrected. Meanwhile, in spite of the shortcomings of the University administration, the country's output of doctors, lawyers, engineers and other professional people at present is of a better quality than that of the beginning of the century and, in fact, seems to warrant a belief that, from the point of view of technical learning and ability, Siam can and will produce, under favourable circumstances, men equal to the work required of them.

The Military and Naval schools, which are exceedingly popular with the highest class, provide a training for young gentlemen who wish to enter the army and the navy, and, though the military forces of Siam are not perhaps her most valuable asset, yet the discipline which the schools inculcate in young men who might otherwise be difficult to control, places them amongst the most healthy institutions of the country.

The selection of students for foreign education is now determined principally by merit. Two scholarships worth £300 a year each for four years, provided by the royal bounty, are competed for annually by the scholars of the special schools, the conditions attaching to them being the study in Europe of any special subject for which the holder may have a preference, with the obligation of adhering to a settled programme and of subsequently placing his services at the disposal of the State. Many of the technical schools also provide scholarships with the object of enabling the best of their students to complete their education in Europe and America. Moreover the scholars studying abroad are more carefully controlled than was formerly the case, so that the bad specimens who at one time brought the foreign-educated youth into disrepute are now comparatively of rare occurrence. Attached to the Siamese Legations at London, Paris and Washington are earnest and capable Superintendents of Foreign Students, specially selected by the King himself, who exercise quasi-parental authority over the youngsters committed to their charge, and through whose offices pass the accounts and every detail connected with their education and general welfare.

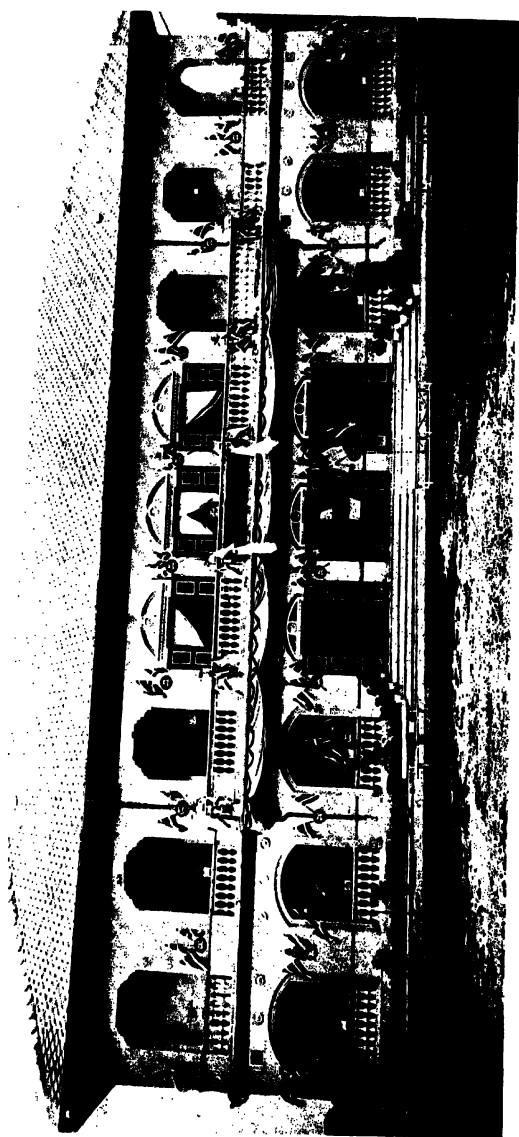
Accustomed as they are to hearing their educational methods decried, it is gratifying to Englishmen, and perhaps also a little surprising, to know that after mature consideration, King Rama V deliberately adopted those very same methods, and that practically all the foreigners whom he engaged to assist his government in this work of fundamental importance were Englishmen who had gained their own education and experience in British schools and universities.

His Majesty Rama VI, an old Cantab, has adhered in the main to the policy of his predecessor, and the accomplished gentleman who holds the portfolio of Minister of Public Instruction at present, is a graduate

of an English university, while Englishmen are employed as masters in the principal government schools.

While the government has been busy with its schemes of education, the Foreign Missions have no whit relaxed their educational efforts. Both the French Roman Catholics and the American Presbyterians continue to devote themselves largely to the work of teaching, and now have well-organised schools in all parts of the country. The College of the Assumption in Bangkok has over four hundred pupils from amongst whom the government still continues to draw many recruits for its various services. The American High School for boys is a well-known institution, the great value of which is fully recognised by the nation. The schools of both denominations in the provinces show a steady increase, both in numbers and attendance and, were it not for religious difficulties, would doubtless long ago have been in receipt of regular grants-in-aid from the government. The American Wattana Wittaya School in Bangkok, formerly the Wang Lang School, and the convents of the Holy Infant Jesus and the Assumption, were the pioneers of female education in Siam, the first of these being still the largest and most successful girls' school in the country.

A development of recent years is seen in the Chinese voluntary schools of Bangkok, established in various parts of the town and attended by large numbers of boys and girls, the children of immigrant Chinese merchants and shop-keepers. These schools, which date from shortly after the Chinese revolution, were at first looked upon by the Siamese with suspicion, as it was thought that they inculcated revolutionary principles and checked that free mixing of Chinese with Siamese blood which has been so much to the advantage of Siam. The suspicion, which seemed at one time likely to lead to interference and suppression, though not unreasonable, has apparently faded away,



TYPICAL GOVERNMENT SCHOOL BUILDING.

a measure of purely nominal control has been accepted and the schools in question flourish and increase. They are certainly creating a class with aspirations and ideals largely foreign to, and seemingly incompatible with, those of Siam.

But even more interesting than the schools themselves is the material upon which the Siamese educational reformers are busy, for upon the quality of the raw material must depend in great measure the value of the finished article, no matter how excellent may be the machinery employed in the manufacture. At four o'clock on every working afternoon the doors of the Bangkok schools are opened, and with shrill whistling and cat-calls, some thousands of small boys project themselves violently into the streets to the disorganisation of the traffic and to the profit of the numerous sweetmeat sellers, who compress within the ensuing five minutes the business of their day. All the boys, when not in Scout uniform, are dressed in straw hats, white linen coats, black or khaki knickerbockers, and black shoes and stockings. Each carries a satchel or strap filled with books, and each one impresses upon the observer the fact that the school-boy, whatever his outward complexion, is much the same all the world over. The Siamese urchin appears intelligent, quick-witted, and independent; he is gifted with the cheerful and casual turn of mind found in his prototype in other countries; he accepts with an equal mind the rôle for which he finds himself cast and, judging by his grinning countenance, does not allow his destiny as a future regenerator of his country to weigh too heavily on his conscience. Of games he has almost none of his own, but, inspired by his King and animated by his masters, has taken furiously to football and to athletics generally. In school he is amenable to discipline, docile and quick to learn. His manners are naturally good, and his respect for

his teachers is great. On the whole, in fact, he is good material and may be generally relied upon to repay the cost and the trouble of giving him a good education.

In the later stages of his development, as a junior clerk in an office or as a student at one of the technical schools, the young Siamese of the middle and upper class presents many points of interest. Absolved from the wearing of school clothes, he now affects the national *panung* with smart, white coat, foreign hat and shoes and stockings or, if a cadet of the Royal Pages or Military schools, a neat uniform and trousers. His fancy, which in this country turns very early to thoughts of love, is busy among the girls of his *entourage* and ideas of marriage are already in his head. His days are devoted to work, not perhaps too strenuous but still work, and his nights to merry-making. He belongs to some club and has his own set, with the members of which he talks endless shop. His sentiments are violently loyal and patriotic, he is inclined to boast of himself and his country and, though he will probably not say so in their presence, he feels himself very much the superior of all foreigners. Withal he is usually docile in the presence of his superiors, his affections are easily aroused, and when so he is a loyal and consistent friend.

In considering the question of education in Siam, the fact should never be lost sight of that she is purely and simply an agricultural country, and that since her cultivable area is wide enough to support by agriculture alone, a population at least three times as great as that which she has at present, there is not the least likelihood that the causes which have converted other nations from agricultural into industrial communities will arise within her borders, at any rate for a very long time to come. For this reason her principal endeavour should be to enable her people to enjoy peace, health, justice, and profit in the development

of her great agricultural resources ; and her Government will be wise to devote its chief educational efforts to creating the means for providing the country with those blessings. The development of Agriculture and the efficient administration of an agricultural population, should be the principal objectives of those who guide the educational aspirations of the nation, for without these all the erudition in the world will not save the country. Should the Siamese ever find themselves forced, by increase of population or other cause, ~~out~~ of their present bucolic state into the less happy one of a commercial and industrial community, it will be time enough then to qualify themselves for that condition both in knowledge and in character.

LANGUAGE AND LITERATURE

The Siamese form of speech belongs to the well-defined Tai group of what has been called the Siamo-Chinese family of languages. Its connection with Chinese is apparent to the student though the two have little or no outward resemblance. Its relationship with the other languages of the Tai group, however, is so close that a person using any one of these would, at least partially, be understood at Bangkok, while between Siamese and Lao, the speech still used by a large part of the people of Siam, the differences are scarcely more than dialectal. Siamese is spoken throughout Central Siam, in all parts of Southern Siam except the Pattani Circle, in Northern Siam along the river banks as far up as Utaradit and Raheng, and in Eastern Siam as far as the confines of the Korat Circle. In Pattani the common language is still Malay, in the upper part of Northern and in the outlying parts of Eastern Siam the prevailing language is Lao and the many hill-tribes which occupy the mountain ranges of these parts have distinct languages of their own.

In its original form Siamese was purely monosyllabic, that is, each true word consisted of a single vowel sound, either preceded by or followed by a consonant. Of such monosyllables Grierson observes that Siamese has 1,851 only, while the other Tai languages are either not at all or very little better off. Such a number of words is, of course, altogether inadequate for the supply of any but the most elementary languages, and hence many syllables have to do duty for the expression of more than one idea, confusion being avoided by the tone in which they

are spoken, whence the term "tonal," which is applied to all the languages of this family. Thus, and also with the aid of a great number of compound words formed by the coupling of two monosyllabic words, and with appropriations from the ancient classic Pali (pronounced "Bali" in Siam) and other foreign sources, the Siamese language, consisting now of some 15,000 words, has been built up. It has been a long time in the making, and moreover is still growing, for the evolution, perhaps more energetically active ~~than~~ at any former period of the history of the race, may be watched to-day.

The process may be said to have begun when the Lao-Tai clans first came in contact with the Môn-Khmer people of the Sukothai-Sawankalok kingdom, and when the former began to adopt the customs and ideas of their more civilised neighbours, at the same time borrowing the words in which to express such customs and ideas. Gradually, as the Lao-Tai blood became fused with the Khmer, the language which the northerners brought with them, primitive, doubtless, but robust and full of the qualities that survive, ousted that which had been the speech of the country, adopting, of course, a great many of its words.

The ancient language of the kingdom of Magadha, called Pali, and derived from Sanskrit, in which the sacred writings of Buddhism were made, was largely instrumental in forming the languages of all Buddhist communities, a similar part being played by Sanskrit amongst Brahmans; wherefore the Môn, Burmese and Lao, early converted to Buddhism, were much affected by the former, while the Khmer, who were at first, and long remained, Brahman, were strongly influenced by the latter. The Siamese language being a combination of Lao and Khmer naturally has affinities with both these and is consequently influenced by both Pali and Sanskrit, and thus forms a sort of

connecting link between all the principal languages of Further India; languages which in their original primitive state can have had little more in common than the few root-words, such as 'pa' and 'ma,' 'father' and 'mother,' which appear more or less the same in every language.

The speech composed of the original Lao-Tai dialect with the admixture of Khmer and the importations from Pali, was sufficient for the needs of the Siamese people down to the 13th and 14th century A.D., but from about that period onwards, the developments of trade and of foreign intercourse brought new objects and new ideas before them at an ever increasing rate, and for the expression of these objects and ideas, words were freely borrowed from foreign languages, when they could not be made by stringing together two or more Siamese syllables; and hence at the present day a considerable number of Chinese, some Malay, and not a few European (especially Portuguese and English) words are in regular daily use, and form part of the language.

When education and government administration after western methods were first introduced, the tendency to adopt European terms wholesale was very marked. But of late years there has been more of an effort to render by Siamese or Pali compound words, the names of new objects and the expression of thoughts running in new channels; and many curious compound forms, part Siamese, part Pali, have been evolved for this purpose. Thus *thora*, 'far distant' in Pali, and *lek*, the Siamese for 'mark' or 'writing,' together make *thoralek*, 'writing from afar,' or 'telegraph,' and again *rot*, 'cart' or 'carriage' in Siamese, and *yon*, 'a machine' in Pali, make *rotyon*, 'machine carriage' or 'motor-car.'

The Siamese alphabet is one of the many variations found in Further India of an ancient Indian form of

writing. It would appear that the early Dravidian settlers in Pegu and Kambodia brought with them the alphabet which they had used in their former homes. In each of these widely separated localities, the character gradually assumed a distinctive form, due doubtless to the differences of language and pronunciation to which it had to accommodate itself, and also in a manner to the local peculiarities of the materials and implements used for writing it. The alphabet first known to the ancestors of the Siamese was a Kambodian variation of the ancient Indian writing, and this they used and, as their language grew, altered to suit their own peculiarities until in course of time the Siamese alphabet as it is now was evolved. This alphabet, though coming directly from the Khmer or Kambodian, shows in its construction a more distant relationship with the Môn or Peguan, the parent of the modern Burmese alphabetic script.

The Siamese alphabet consists of forty-four consonants in each of which the vowel sound 'aw' is inherent, wherefore it is called syllabic, and of thirty vowels, all marked, not by individual letters, but by signs written above, below, before or after the consonant in connection with which they are to be pronounced. The two letters which by themselves produce the sound 'aw' and 'yaw,' and which may be likened to the European letters 'a' and 'y,' are not considered as vowels, because they are used as consonants in the support of the vowel signs. To the European it is at first difficult to understand the necessity for so many as forty-four consonants, seeing that the Roman alphabet with only twenty is sufficient for the expression of the intricate languages of the West, but the reason for so large a number becomes clear when it is known that several letters express each a slightly different intonation of what is practically the same

consonant. For instance the sound 'kh' is represented by six different letters, and variants of the sound of 't' by no less than eight, other letters being present only for use in certain words imported from Pali or Sanskrit (one letter being, in fact, used in one word only in the whole language).

The vowel signs have no sound by themselves, but act upon the vowel sound, 'aw,' inherent in every consonant, converting it into 'a,' 'i,' 'o,' 'ai,' and so on. Each of the signs has a name, and some of them produce modulations so closely resembling those made by another that at the present day they are scarcely to be distinguished apart. Sometimes the vowel sound is suppressed altogether, notably in consonants at the end of a word.

A hard and fast rule of pronunciation is that only vowel or diphthong sounds, or the letters 'm,' 'n,' 'ng,' 'k,' 't,' and 'p' are permissible at the end of words; in accordance with this rule the final letter of all words ending in anything else is simply suppressed or is pronounced as though it were a letter producing one or other of these sounds. Thus many of the words obtained from foreign sources, not excluding Pali and Sanskrit, are more or less mutilated in pronunciation, though the entirely suppressed or altered letter or syllable is still retained in writing. Until this rule is understood the student is usually much confused by the apparently methodless pronunciation of a final 'r' as 'n,' of 's' as 't,' and so forth. There are endless other vagaries of pronunciation each of which is provided for by rule, and there are also some which appear to be colloquialisms and are not accounted for in the grammar, of which last the interchangeability of certain letters is one of the most noticeable points, 's' and 't,' 'k' and 't,' 'r' and 'l,' 'n' and 'l,' being commonly interchanged. The substitution of 't' for 's' or of 't' for 'k' is chiefly heard amongst

uneducated people; the use of 'l' instead of 'r,' which is now very common, was originally due to the incapacity of the Chinese section of the population to pronounce the letter 'r,' and 'l' for 'n' is a transposition common to other eastern languages, natives of India, for instance, frequently saying Nucklow for Lucknow, as the Siamese say Lakon for Nakon.

Siamese is written from left to right. In manuscript there is usually no space left between words, but punctuation is expressed by intervals isolating phrases and sentences. The paragraph is preceded by a sign called *jongman*, a circle within a circle, and is closed by another called *khomut*, a sort of corkscrew flourish. A sign called *tho* denotes repetition of the word preceding it, and another sign called *labanyan* stands for etcetera.

Some sixty or more years ago a very curious alphabet was invented by Prince Phra Chom Klao, then a monk under the title Wajirawana, and afterwards King Rama IV. This, which was called Ariyaka, was composed of Pali, Greek and Roman characters, and the object of it was to permit the rendering of all Siamese vowels by letters placed in line with the consonants, instead of by signs above and below them. It seems also to have been the desire of the inventor to provide a sort of national alphabet which might take the place of Khom (the Khmer or Kambodian alphabet) which is used for scriptural writings in the Siamese temples. Several monks were instructed in the new method, it was introduced into the *Wat* and some manuscript books were made with it. The letters were also made into type, and a few books were printed. But the scheme failed to arouse the serious attention of the ecclesiastical body, it never came into general use, and of the few men who learnt it most are now dead, while the books printed in accordance with it, are kept in the National Library merely as curiosities.

It is perhaps in the mastering of the tonal system that the greatest difficulty with the Siamese language lies, at any rate for foreigners. It has already been remarked that, the number of original true words being too small for any but the most primitive language, several meanings had to be applied to one monosyllable, the difference being marked by the tone. Of the simpler kind of these tones there are five, the common, the rising, the acute, the deep, and the dropped, any one of which when applied to a syllable may give it quite a distinct meaning. Four of the simple tones are marked in the written character, by signs placed over the consonant affected, and the absence of such mark implies that the one remaining tone is to be used. A further complication, however, is caused by the fact that the consonants are grouped into three classes, to each of which a special tone applies, and, consequently, the application of the tonal signs to a letter has a different effect according to the class to which such letter belongs. It is therefore a difficult matter to learn to read the various tones correctly, it is still more difficult to commit them to memory, and it is perhaps most difficult of all to pronounce them properly when learnt. The inflections of voice to which Europeans are accustomed, such as the interrogatory, have no place in Siamese, which is all in the even tone when not varied by the special tone attaching to the words spoken; and the tones then used, though usually distinct enough, are sometimes, in spite of their extreme significance, so slightly marked as to escape any but a practised ear. Every syllable, however, has its own distinct tone which, no matter how fine it be, must be exactly rendered to secure accuracy of pronunciation and, indeed, of meaning. The majority of syllables, that is words, have, however, only one, or at the most two, meanings, but there are some which are used with

a number of different inflections each of which gives them a new meaning. Thus for example, *Kao* or *Khao* may mean 'they,' 'badly,' 'rice,' 'white,' 'old,' or 'new'; *Seua* may mean 'coat,' 'tiger' or 'mat'; and *fai* may mean 'a dam,' 'a party,' 'on the side of,' 'cotton,' 'to take up,' 'lavish,' 'fire,' or 'pimple,' according to the tone in which the word is spoken. A slight error in tone may therefore make a whole sentence unintelligible or may alter the meaning of it in altogether surprising and perhaps disconcerting manner.

The number of compound words in Siamese is very large and is divided into many groups. The original words of the language were mostly used up in supplying names to genera, families and groups of objects, and to a few of the most common and striking varieties of these, so that for every other variety which has come to notice during the existence of the language, a compound word made up of the class name and another, or others indicative of some noticeable feature of the variety in question, has been coined and applied to it, in the same manner as is found in European languages but to an infinitely greater extent. Thus the names of many plants are made up of the word *ton*, 'a plant,' with another word or words descriptive of the particular species, such as 'the broad-leaved,' 'the thirty rooted,' etc., appended. Again the names of almost all fish include the word *pla*, 'a fish,' preceding the distinctive term 'blue,' 'spoon-shaped,' 'tongue-shaped,' 'biting' or 'fighting,' 'slippery,' and so forth. The same rule applies to birds, the word *nok*, 'a bird,' forming part of most bird names; to minerals, where the generic term *hin*, 'a stone,' or *raa*, 'ore,' is used in a similar manner, and to many other classes of objects. Another great group of compound words is that which has been formed to supply names for abstract notions, for which the language contains

hardly any original monosyllabic words at all. These are mostly arrived at by prefixing one of the words *Khuam*, 'a matter' or 'an affair,' *kham*, 'a word,' or *kän*, 'work,' to a verb or adjective. Thus *khuam* compounded with *hen* (seeing), makes *khuam-hen* or 'opinion'; with *siachai* (destroyed heart), makes *khuam-siachai* or 'regret'; with *ching* (true) makes *khuam-ching* or 'truth.' Similarly *kham* compounded with *sang* (ordering) makes *kham-sang*, 'a command,' with *nap* (saluting), makes *kham-nap*, 'a salutation' and with *saun* (teaching), makes *kham-saun*, 'a doctrine.' Also *Kän* with *lieng* (feeding), makes *kän-lieng*, 'a feast,' and with *sop* (burying), makes *kän-sop*, 'a burial.' A third group is that of names for objects or for the expression of ideas which have been evolved by the combination of two or more words, each of which has a meaning only remotely, or not at all, connected with that of the word thus formed. Such are *nam ta*, 'water of the eye' or 'tear'; *nam tom*, 'water of the breast' or 'milk'; *hang seuu*, 'tiger's tail' or 'rudder of a boat'; *pak ka*, 'crow's mouth' or 'pen'; *Kaatoa*, 'untying the body' or 'excusing oneself'; *khaw lap*, 'a sleeping circumstance' or 'mystery'; *khai na*, 'selling the face' or 'putting to shame'; *kheng meu*, 'hard hand' or 'one devoted to work'; *khlai chai*, 'untwisting the heart' or 'being relieved'; *khap chai*, 'compressed heart' or 'distressed'; *khat chai* 'obstructed heart' or 'angry,' and countless others of which many are peculiar to Siamese methods of construction, while some betray a sequence of ideas common to other people, among the last being *khai muk*, 'egg of the oyster' or 'pearl'; *khao fai*, 'hill of fire' or 'volcano'; *rot fai*, 'fire carriage' or 'railway engine.'

The words *chao*, 'lord' or 'master'; *hoa*, 'head'; *luk*, 'offspring'; *maa*, 'mother'; enter largely into the composition of words, as *chao chiwit*, 'master of

life' or 'king'; *chao ti*, 'master of the place' or 'landlord'; *hoa muang*, 'head of the province' or 'capital'; *luk mai*, 'offspring of the trees' or 'fruit'; *luk-sit*, 'offspring of learning' or 'pupil'; *me-nam*, 'mother (or chief) of waters' or 'river'; *me-tap*, 'chief of the army' or 'general'; and there are many other words such as *phu* and *nak*, meaning 'person,' and *khi*, 'offal,' which fill similar rôles.

The construction of the sentence in Siamese is straightforward and simple. The subject of the sentence precedes the verb and the object follows it. The possessive pronoun follows the object. The adverb usually follows the verb. In compound sentences the verbs are placed together as in English, not separated by the object as in German. When an action is expressed in the past, the word which forms with the verb, the past tense, is divided from the verb itself by the object. Examples are :

Rao phuying sam khon cha pai kio khao hai chang kin.

We women three persons will go to reap paddy give elephant eat.

We three women will go and cut some rice to feed the elephants.

Khun Phaw kong phom you thi nai ?

Father my live place which ?

Where is my father ?

Khun Phaw kong than pai talat leao.

Father belong you go market done.

Your father has gone to market.

Distinct words denoting the gender of nouns are very few, no more, indeed, than those which stand for parents and grand-parents, as *phaw*, 'father,' *maa*, 'mother,' *pu* 'paternal grandfather,' *ta*, maternal grandfather,' *ya*, 'paternal grandmother,' and *yai*,

'maternal grandmother,' and a few words of Pali or Sanskrit origin which are seldom used. In order to distinguish gender, the rule is to add to the noun one of several words which have been devised for the purpose. Such words as *chai*, 'masculine,' and *ying* or *sao*, 'feminine,' also *ai*, 'masculine,' and *i* (ee), 'feminine,' all of which are applicable to human beings, the last two preceding, and the others succeeding, the noun. There are also *toa phu*, 'masculine,' and *toa mia*, 'feminine,' following the noun, and *nang*, 'feminine,' preceding the noun, applied to women and animals. Examples are *lukchai*, 'son,' and *lukying*, 'daughter,' *dekchai*, 'small boy,' and *dekying*, 'little girl,' also *nong sao*, 'younger sister,' *Ngoa toaphu* means 'a bull,' and *ngoa toamia* or *nang ngoa*, 'a cow.' The expression *ai* and *i*, though at one time applicable to human beings generally, have become degraded, and are now used chiefly to designate slaves, outlaws, and persons in dishonourable circumstances, though at the same time they are still employed to distinguish the sex of babies, and in pet names for children. Thus a robber is called *ai khon rai*, and a harlot *i dauk thong*, while *ai nu* and *i nu*, 'mousey,' are pet names often given to small children after they have grown out of the earliest baby age when they are called *Ai Deng*, *I Deng*, 'Master,' or 'Miss,' 'Red.'

To denote the plural, special expressions are used with the noun, which itself remains unchanged. Thus *khon nung* means 'a (one) man,' and *khon thanglai* means 'men.' Also *khon le* means 'each man,' *khon dio*, 'one man only,' *khon dai*, 'someone,' *khon thang phong*, 'all men,' *thuk khon*, 'every man,' and *khon bang* or *bang khon*, 'some men.'

Adjectives include many true words such as *rawn*, 'hot,' *nao*, 'cold,' *di*, 'good,' *chua*, 'bad,' and so forth, but a greater number are compounds of a noun and a verb, or of a noun in conjunction with one of

the true adjectival words, which last, in such combination, assumes a new meaning. Some examples of these compound adjectives have been given amongst compound words; and a few others are *na*, 'face,' and *kloa*, 'afraid,' which make *nakloa*, 'terrible'; *na*, 'face,' and *klut*, 'to hate,' which make *nakliat*, 'loathsome'; *chai*, 'heart,' and *di*, 'good,' making *chaidi*, 'benevolent'; *dí* and *chai* making *dichai*, 'glad'; *tem*, 'full,' and *chai*, 'heart,' making *temchai*, 'willing'; *thi*, 'one who,' and *rak*, 'to love,' making *thirak*, 'beloved.' Sometimes also the pronouns *an*, 'who' and *cheung* or *seung*, 'which,' are used in conjunction with verbs to make adjectives as *anwa*, 'who speaks,' or 'talkative.'

When a Siamese speaks with another he has always in his mind the relative rank in life of himself and of the person addressed, and chooses his pronouns, both of the first and second person, with due consideration for such rank, remembering also that politeness demands that his own rank be slightly depreciated and that of the other appreciated. Hence the language is very rich in personal pronouns, or rather in words and collections of words which do duty as such. Thus for the first person, the word *chan* is provided for speaking with an equal, but is more often used when the person addressed is of slightly inferior rank; *phom* is for use when addressing a superior, but is employed out of politeness when speaking to an equal, being varied to *kraphom* for a noble, and *klaokraphom* for a prince; *khachao*, *khaphrachao* and *khaphraphut-thachao*, meaning literally, 'I the servant of the lord,' 'I the servant of the excellent lord,' and 'I the servant of the excellently enlightened lord,' are used when the person speaking wishes to emphasise the superiority of the person addressed, the last being used only in speaking to the king or to princes, as are also *khaphraong* and *khaphrabat*, meaning 'I the servant of the excellent

quality,' and 'I the servant under excellent feet.' *Kha* alone is used when the person addressed is distinctly inferior, and *ku*, 'I,' when the person speaking desires to assert great superiority or to be rude.

Except for the words *eng*, 'you,' to an inferior, and *meung*, 'you,' and *man*, 'he,' both contemptuous terms, personal pronouns of the second and third person are scarcely to be distinguished. *Nai*, 'master,' *than*, 'sir,' and *kaa*, 'old one,' are most commonly used in the second person but can be applied in the third. The remainder except *su*, 'you,' an old form still commonly used in Shan and Lao but in Siamese confined now to poetry, and *khao*, 'they,' are all interchangeable. Of these a few examples are *khun*, 'honourable,' a polite form of address in common use, children addressing their parents as *khun phaw*, 'honourable father,' and *khun maa*, 'honourable mother'; *phra det phrakhun*, 'excellent splendour and mercy,' which is used when asking a favour of one in power; *taithao* or *taithaokaruna*, 'under the feet,' employed when speaking to or of a high officer of state; *japharabat* and *jala-ongthuliphrabat*, 'I beneath the sole of your feet,' and 'I in the dust beneath the sole of your august feet,' phrases meaning 'you' or 'he,' generally employed when speaking to or of royalty, the first for princes and the second for kings. These last terms have now, of course, to a great extent lost their literal significance and are simply regarded as polite and correct forms of speech.

The personal pronouns all act as possessive when placed after the word expressing the object to which they refer, either alone or in conjunction with such words as *khong* or *heng*, 'belonging to,' signifying possession.

Ni, 'this,' *nan*, 'that,' and *nawn*, 'yonder' are demonstrative pronouns, and *thi*, 'who,' *cheung* or *seung*, 'which,' *an*, 'who' or 'which,' and *phu*, 'the

one who,' are relative pronouns. *Khai*, 'who,' and *arai*, 'what,' are interrogative pronouns.

Like the other parts of speech, verbs are unalterable words, either simple monosyllabic or compound, voice, mood and tense being made by the addition of other monosyllabic words, or left to be understood from the context or by the position of the verb in the sentence. Thus *khao kha mi* means 'He kills (a) bear,' and *khao ka tè mi* means 'He is killed by a bear'; the addition of the word *tè*, 'by,' changing the mood of the verb from active to passive. *Doi*, 'with' is another word which is used in the same manner. Again, *khon tèk káo* means '(a) man breaks (a) glass,' and *káo tèk pai* means '(a) glass is broken,' the word *pai*, 'going,' making the verb to break passive. Also *khon khien dek* means '(The) man beats (the) boy,' and *dek thuk khien* means '(The) boy is beaten,' the addition of the word *thuk*, 'touched,' making the verb 'to beat,' and others relating to human affliction, passive.

The present indicative tense is rendered *khao kin*, 'He eats' or *khao kin yu*, literally 'He eat living,' or 'He is eating' (*yu* is the verb 'live'). *Khao kin leao*, literally 'He eat finished,' is the past indicative, *leao* being the verb 'finish.' The future indicative is *khao cha kin*, 'He will eat,' and the future perfect is *khao cha kin leao*, 'He will eat finished' or 'He will have eaten.' *Bangthi cha kin*, 'Perhaps (he) will eat,' and *pheua cha kin dai*, 'in order that eat able' or 'in order that he may eat,' may be called forms of the subjunctive mood. *Kin* or *kin si*, 'eat,' *hai kin*, 'let eat,' *khong kin*, 'ought (to) eat,' and *tong kin*, 'must eat,' are forms of the imperative mood.

Among compound verbs which commonly recur are those in which *wai*, 'preserve,' *pai*, 'go,' *ma*, 'come,' *lông*, 'descend,' are used with another verb, as *fak wai*, 'deposit,' *ao pai*, 'take go,' or 'take away,' *ao ma*,

'take come' or 'bring,' and *tok long*, 'fall descend' or 'fall down.' In using this class of compound verbs the object of the sentence is usually placed between the two parts of the verb, thus *ao muak pai*, 'take hat go' or 'take away (the) hat.'

A large number of compound verbs are formed by the union of a noun and a verb, examples of which are *plong hu*, 'to let down the ear' or 'to listen,' *phuk ma*, 'to tie the horse' or 'to harness,' *phaw chai*, 'to compress the heart' or 'to fear,' *long meu*, 'to put down the hand' or 'to begin.'

Adverbs of place are *thi ni*, 'this place,' *thi nan*, 'that place,' *thi naun*, 'yonder place,' *thi nai*, 'which place,' and *cha : nai*, 'from which place.' Some adverbs of distance are *klai*, 'near' and *klai*, 'far,' two words which, though neither written nor pronounced exactly alike in Siamese, are so nearly the same that it is impossible to render them differently in English characters. Also *hang*, 'separate,' *nä*, 'before,' *lang*, 'behind,' *sai*, 'left,' and *khwa*, 'right.' Adverbs of time are *meua*, 'time when,' *meua kaun*, or *thi kaun*, 'formerly,' *meua nan*, 'that time,' *meua nä*, *meua pieng na*, *meua pai lang*, and *seup nä*, 'future time.' Adverbs of affirmation are *chai*, 'it is so,' *chä*, and several other words which are more like affirmative hisses and grunts than true speech. There is no absolutely flat negation corresponding to 'no,' the use of such being contrary to Siamese conceptions of politeness. *Mai chai*, apparently a corruption of *mai pen tam chai*, 'it is not in accordance with my heart,' or 'it is not so,' is the shortest form of negation, and others are *hă me dai*, literally, 'seek is not,' or 'I have considered and do not find it so,' and *mai hen doi*, 'not see together with' or 'I do not agree.' The word *plao*, meaning 'empty,' 'vacant,' is used as a negative in familiar conversation. All the affirmatives given above are for use by one addressing an equal

or an inferior.. From an inferior to a superior the expression *khaw rap*, ' (I) ask (to) receive,' is the invariable affirmative except when the person to whom affirmation is addressed is a noble of high rank, when it becomes *khaw rap phom*, for a royalty when it is *phraphutthachao^{kh}ha khaw rap*. ' I beneath the sole of the august feet ask to receive,' for the king, and the same sentence abbreviated to *petchaka* for a prince. The Siamese scarcely contemplates the use of negation towards one of higher rank than the speaker, certainly not when the former is royal or noble.

Conjunctions are *kaw*, ' then,' *lè*, ' and,' *kawdi*, ' then good ' or ' well then,' also *leao kaw*, ' finished, then.' *Anung*, ' further ' or ' again,' is commonly used to introduce a new sentence. *Tè*, *tè wa*, and *mè*, are all different forms of ' but.' *Wen tè* means ' except ' and *mè wa* or *men wa*, ' although.' *Het cha ni* means ' therefore.' *Proh* and *proh wa* mean ' because ' and *doi* and *doi wa*, mean ' whereupon.' *Ta* means ' if,' and *pheua*, *pheua wa*, and *pedang nan* stand for ' in order that.'

Among interjections figure many of the hisses and grunts shown as affirmatives. Astonishment is expressed by *maa woi*, ' oh mother,' and painful sensations produce *phaw oi*, ' oh father.' The language of everyday use is well supplied with expletives most of which are of an indecent character.

In the use of numerals a class of words more or less descriptive of the objects enumerated is employed together with the numeral. Thus ' two monks ' is rendered *phra song rup*, or ' Excellent ones two images,' and ' two princes ' are *chao nai song phra ong*, or ' Princes two excellent members.' ' Three men ' are *khon sam khon*, ' men three men,' but ' three bullocks ' are *ngoa sam toa*, ' bullocks three bodies,' the word *toa* being applicable in this manner to all the lower animals except elephants which are *chang*

sam cheuak, or 'Elephants three ropes.' *Toa* is also used in this way for many inanimate objects, as is *an*, 'a thing.' Flat things are *phen*, *phin*, *phun* or *pan*; *muan*, 'a roll,' is used for things rolled up, as *seua lai muan*, 'many rolls of matting.' *Lang*, 'back,' is applied to things covered in, such as thrones, houses and sheds, while *reuan*, 'house,' is used for things encased, as *nalika song reuan*, 'two watches.' Things done up in bundles are *klum*, 'packet,' and things in the mass are *kong*, 'a party,' as *sai sam kong*, 'three heaps of sand.' Things held in the hand are *hian*, 'handle,' as *rom si khan*, 'Four umbrellas,' literally, 'umbrellas three handles.' *Lem* is applied to blades, as *dap song lem*, 'two swords,' and hence to all weapons as *peun nung lem*, 'one gun.' Curiously enough carts are *lem* and carriages are *khan*. There are many other such descriptive words, some of which apply to large groups of objects, while many are used for enumerating one only, an example of this last being the word *nat*, meaning 'to puff,' used in connection with a charge of powder, either snuff, which is blown through a tube up the nose, or gunpowder, as, for instance, *luk krabauk yisip nat*, 'twenty cartridges.' Sometimes also, instead of a descriptive word, the object enumerated is simply repeated, as *mä sam mä*, 'dogs three dogs,' instead of *mä sam toa*, 'dogs three bodies.' Descriptive words used in the above manner are, of course, common to all languages, but are perhaps more numerous in those of Further India than anywhere else.

It will now appear that Siamese, for all its monosyllabic nature, possibly on that very account, is a complicated language and one which can be used correctly only after long study and practice, but this fact will be still more evident when it is understood that, in addition to the ordinary language of the people, there is a completely different set of words ordained for the use of royalty. This, which Frankfurter calls

"Palace language," and describes as a "tendency not to call a spade a spade, but an agricultural implement," appears to have come into existence from a desire to avoid the use, in the presence of royalty, of downright expressions of vulgarity, or of words which might be capable of conveying an unpleasant or indelicate idea other than the meaning intended, which, in the Siamese language, where so much depends on nice distinctions of tone, may happen in ordinary conversation. In the search to escape from the vulgar, words of Sanskrit origin have been freely adopted and many Kambodian words are also used. From the fact that where the language contains a word of Lao-Tai origin and one of Kambodian (or Khmer) origin for one and the same thing, the Lao-Tai word is usually the vulgar one and the Khmer is the polite one, it is perhaps to be inferred that originally Khmer, the language of a people of superior civilisation, may, in the early days of contact between the two races, have been considered more polite than the rougher and more barbarous Lao-Tai vernacular which ultimately supplanted it, and that therefore Khmer words might sometimes be used by persons who wished to show a niceness of speech, somewhat in the manner of those who introduced many French words into the English language under the impression that the foreign words were more polite (an example being the substitution of the word "chemise" for the English word "shift.") The Palace language is so complete that the dog, the pig, the crow and other common and unclean animals, are all expressed by special words, while the actions of royalty such as eating, sleeping, walking, speaking, bathing, dying, are spoken of in words quite distinct from those used to describe similar actions of ordinary people. The pronouns and affirmations used in speaking to or of royal persons have already been mentioned.

The prose literature of Siam consists largely of mythological and historical fables almost all of which are of Indian origin, having come to Siam direct or through the Khmer, and now appearing dressed in language and detail to suit Siamese tastes and ideas. The number of tales thus adapted is larger than is usually supposed, the majority of them being known to few beyond the writers who laboriously copy them, and the professional raconteurs who draw upon them for the replenishing of their stock-in-trade. Many of the best known have been made into stage plays, and it is in this form that they generally come to the notice of the public. Amongst them are *Ramakien*, taken from the great Hindu epic *Ramayana*; *Wetyasunyin*, the story of a king who was so wrought upon by the contemplation of a withered tree that he renounced his proud position and became an ascetic; *Worawongs*, a tale of the love of a prince for a princess who was imprisoned and guarded by an enchanted spear which fatally stabbed the hero as he climbed to his lady's bower; *Mahasot*, an account of the wars of King Mahasot; *Chalawan*, a tale of a princess who was carried off by an enamoured crocodile and rescued by her human lover, only after a series of thrilling adventures. *Unarud*, the life-story of Anuruddha, a demigod descended from Krishna; *Phumhon*, the story of a princess beloved by an elephant, and of her adventures; *Nang U Thay*, one of the many stories of the loves of a *Nak*, 'Snake' or 'Dragon,' princess disguised in human shape, and a mortal prince; and *Prang Tong*, the tale of a princess who, before birth, was promised by her mother to a *Yak*, or 'giant,' in return for a certain fruit which she, the mother, desired to eat; of the carrying off of the infant by the *Yak*, of her life amongst the giants, and of her ultimate restoration to her family. The story called *Nok Khum* is one of the theories of the genesis of mankind, 'the *nok khum* being the sacred goose, or 'Hansa, from whose



PREPARATION OF PALM LEAF WRITING MATERIAL.

(Siam I. p. 278)

eggs the first human beings were supposed to have been hatched. There are also many stories connected with the Buddha, the *Pathomma Somphothiyan* or 'Life' of the Teacher, and tales of episodes in his final life and in the former stages of his existence.

The custom of etching, upon strips of palm leaf, certain formulæ, doxologies and similar pronouncements of a sacred character, is common to several nations of Further India and is much practised in Siam. The leaf used is that of a small palm called, in Siamese, *Lahn*, which grows wild chiefly in the Chai Badan neighbourhood on the Pasak River. Large quantities of the leaves are collected annually by certain villagers whose work is rewarded by a partial exemption from taxation. The leaves are selected, cut into strips and made into bundles, in which condition they are forwarded to the Ecclesiastical authorities for distribution.

There exist a considerable number of books on astrology and the casting of horoscopes, on the ways to secure victory in war, success in love, business or gambling, and on other branches of magic to which subject the Siamese have always been very partial. On the Siamese practice of medicine, which is closely allied to magic, there are also several works. The *Niti* literature, that is, writings consisting of old sayings, traditions and good counsels, forms a separate class and contains amongst many other works the celebrated 'Maxims of Phra Ruang,' the national hero king, on which the imagination of every young Siamese is fed to satiety. Another well-known *Niti* work is that called 'Rules for the conduct of Kings,' translated from the Pali.

The *Pitti Sibsong Deun*, or 'Ceremonies for the twelve months,' is a well-known compilation comprising descriptions of, and instructions for, the royal ceremonies provided for each month of the year.

Amongst *Belles lettres* may be included the writings of Khun Luang Ha Wat, apparently a *littérateur* attached to the Court of one of the kings of Ayuthia ; the well-known Reflections of the Lady Nopamat ; the letters of king Rama V to his Queen, acting as Regent during the absence of His Majesty in Europe ; also the same king's letters to one of his daughters, written in the course of his travels abroad. There are also books containing sermons and other writings of a religious character, compiled from the works of His Royal Highness the late Supreme Patriarch Vichararañana.

His Majesty King Rama VI has always had a strong inclination towards literature. In boyhood he devoted himself very much to reading and to the practice of writing and, while quite a young man, had already acquired an easy and lucid literary style both in his own language and in English. One of his earliest works, a thesis on "The War of the Polish Succession," aroused the admiration of all who read it, and created for him a literary reputation which was very much enhanced when, later on, His Majesty appeared as publicist, poet and playwright with equal success in all three branches of the art. For a period of nearly twenty years, a rapid succession of erudite studies of the art of government, articles on the social problems of the time both at home and abroad, wise exhortations to his people, innumerable verses and plays, sometimes gay and light, but more often fraught with the serious desire to educate and elevate the national mind, has given constant evidence of the extraordinary ability and versatility of the Royal pen and of the comprehensive width of His Majesty's learning. It is not too much to say that amongst these results of an untiring industry and enthusiasm are to be found some of the very best examples of modern Siamese literature.

In works on history Siamese literature is unfortu-

nately deficient. There is evidence that, as in the case of all the other kingdoms of Further India, complete and detailed chronicles were compiled from reign to reign by order of Siamese kings, but these have frequently been scattered and lost in times of disturbance and recompiled without much accuracy from memory or from fragments subsequently collected. Thus the "Annals of the North," the "Annals of Krung Kao," or Ayuthia, and the "Book of Lives of the Four Kings" (of the present dynasty), which three works together form the only more or less connected history of the country from remote times down to the beginning of the present reign, contain, at least so far as the earlier parts are concerned, much that is inaccurate, and a good deal which is certainly altogether untrue. It has lately become the fashion to produce works on historical, as well as other, subjects for distribution at cremations and on birthday celebrations and so forth, and amongst these may be noted especially an able and compendious commentary on the history of Siam compiled by H.R.H. Prince Damrong. Also there are several translations of works on foreign history, some of which have been issued under the auspices of the Educational Department.

Of legal books the number is almost plethoric. The *Laksana Phra Thamasat*, *Phra Tamra*, *Phra Tamnon*, *Inthapat*, and *Phra Racha Kamnot*, are ancient works setting forth the laws of the country in their oldest form, adapted from the *Dharmaçastra* and the Laws of Manu. Many of the Edicts passed by kings of the Ayuthia period have been preserved, but those of the present dynasty now reigning at Bangkok naturally form by far the greatest part of this branch of the national literature. These include a great number of Revenue Regulations, Laws on Civil matters, such as mortgage, bankruptcy, right of way, companies, and laws governing Legal Procedure, all of which adhere to

Western principles. A notable addition is the Penal Code, a large and comprehensive work, based upon the Indian, Japanese, and French Codes, and issued in 1908.

Poetry is a very ancient art in Siam and has always been held in high honour; many of the best known poets were, indeed, members of the royal family. There are several quite distinct forms of metre of which the most commonly used are the *Khlong*, the *Kap* and the *Llon*. The *Khlong* is rhythmic, and play being on the inflexion of the voice in speaking the words; this inflexion is arranged according to fixed schemes, the rhyme, if it can be so called, being sought, not in the similarity of syllables, but of intonation. The *Kap* is rhythmical and also has rhyming syllables. The lines contain an equal number of syllables and are arranged in stanzas of four lines each. The last syllable of the first line rhymes with the third syllable of the second line, the last of the second line with the last of the third line and also with the first of the fourth line; finally the fourth line rhymes with the last syllable of the second line of the next succeeding stanza. The opening stanzas of a celebrated poem called *Kap haw klong haa rua*, or the 'Song of the Procession of Boats,' may serve as example of the latter somewhat complicated system of rhyme. Roughly transliterated they run thus:—

Phra sadet doi den chon |
 Sông rua toñ | ngam chua chai |
 King keao phreao pan narai |
 Pai | ðh yap chap ngam ngawn |

Nä wä nen pen kanät |
 Luan rup sät | sen yä kanawn |
 Rua rio tiew pong salawn |
 S'kawn | lan kran kren phong |

and mean approximately :—

The king embarks upon the water
 Using his most magnificent barge
 Handsomely ornamented with " King keao."
 The movement of the pliant paddles is beautiful to see
 Crowded together but preserving order,
 Each shaped in the semblance of a curious beast,
 The vessels move along with their flags flying,
 Making the water to roar and foam.

.....

The number of poems in one or other of the two metres, *Khlong* and *Kap*, is very great and includes verses on almost every theme. In the *Nirat* poetry, a very favourite form of verse, both are often used, a stanza in *Khlong* serving as a sort of argument at the head of a set of verses, or canto, in *Kap*. This *Nirat* poetry takes the form of narrative, addressed by a traveller to his distant lady-love, of a journey in which every object and circumstance serves but to remind the wanderer of some one of the innumerable virtues and beauties of her whose absence from his side he continually deplores. In many such works the journey is an imaginary one introduced by the poet as a theme on which to string together as many sweet similes and lover's rhapsodies as his fancy can devise, but in some it is a true record of travelling or campaigning, and these last have been found to contain much valuable historical information concerning the condition of out-lying parts of the kingdom from time to time. One of the most popular *Nirat* poems pictures the travels of a young prince accompanying his father, the king, upon an expedition into the interior by water. A rough translation of a few of its many stanzas, taken at random, will convey some idea of the usual tenour of such works :—

The *Khrut* boat carrying a *Nak* in its mouth,
Gracefully floating at the head of the expedition,
Its rowers paddling with slow, quiet action,
Comes with the song, *Hô Hè : Hô Hè :*

I see the fishes swimming in couples
And my thoughts turn to you with sadness.
Even the fish avoid the miseries of separation !
What am I doing here alone without you ?

As the boat passes I admire the trees
Growing upon the banks, orderly and of so many kinds,
The flowers burst out upon them in glowing masses
And their pleasing scent is like your perfumed breath.

I see the waving branch of the *Nang Yem* plant,
The soft blooms, opening, disclose their delicate interior,
And my mind is carried swiftly to the thought of you
When your dear lips part in their sweetest smile.

Of the little love songs in *klon* metre, called *Klon pet ton*, there are many hundreds, and every youth and maiden has a selection ever at the tip of the tongue. These follow a prescribed form, and consist of eight lines divided into two stanzas of four lines each, every line containing eight syllables. The last syllable of the first line rhymes with the third syllable of the second, and the final of the second line with the final of the third. The songs treat of all the aspects and conditions of love, the greater number being, however, invitations and solicitations, though not a few are laments on the inconstancy of the affections. Of the latter class an example is the well-known *Rong Lam Nok Khun Thong* or "The Minah Bird Lament," the bird being a poetical simile for a fickle lady. The words are :—

Nok khun thong khong rao te kao kawn
Pai ruam khawn kan chao keao s'leao^{naw}.
Chi cha ! Chang ke rai nam chai kaw
Tit nok taw leao k'long yu crong^{thong}.

Pho plat ! Plat pai ! Kai chai tek
 Thep cha plek mai ruchak tak chao khong.
 Bun pi noi mi dai rom chao khun thong
 Dai phrakong kieng kan taonan eui.

In this song the rhymes are plainly distinguishable and the metre is well preserved. The addition of the meaningless word *eui* at the end of the second stanza is a common device for completing the metre and making the end of the song. An attempt to render "The Minah Bird Lament" in English, with the proper metre and with the rhymes placed as in the original, is as follows :—

The Minah, once my pride, my own, |
 Now has flown | off with Popinjay. |
 Ah me ! What shall my poor heart say ? |
 Left, for gay and gaudy parrot.

Broken my heart ! Oh cruel fate ! |
 Changed my state ! | We meet not again. |
 Luckless ! All hope to hold you vain : |
 I feel our love is at an end.

A fourth poetical metre is *Chan* which, however, is not so much used as the others.

Before the introduction of printing in Siam, literary works were all in the form of manuscript, written with a soft pencil (called *Toa Rong*) of gamboge powdered and made into sticks, upon the black surface of a long strip of carboard (*Nangseu Dam*) made of a coarse local paper and folded backwards and forwards into 'accordion' pleats. The pencil made a yellow streak on the black surface and the script was often freely illuminated and illustrated in colours. Sometimes the surface of the cardboard was not blackened but left its natural yellowish-white colour, in which case the writing was done in Chinese ink, and this

latter style was found best adapted for colour illustration. Such works were scattered about in the *Wat* and the houses of the better classes, and doubtless very many of the best examples of the most skilful writers and illustrators have perished from neglect. But a few years ago, large numbers were rescued at the instance of Prince Damrong, and housed in the National Vajirayana Library where, under the care of the learned curator, Dr. Frankfurter, they were repaired, classified and catalogued.

It is difficult to overrate the services which these gentlemen rendered to the literature of the country. The old National Library, a government institution, which was founded a great many years ago as a storehouse for the national literature, and to foster a taste for serious reading, altogether failed to fulfil these objects and had degenerated into a sort of club, resorted to by a few young men for the purpose of playing billiards, looking at the comic European papers and occasionally reading English novels. The bookshelves were loaded with much useless foreign literature, and the few books of value relating to Siam, which had been spasmodically collected, were left rotting in a forgotten corner. The national literature was entirely unrepresented. Such was the condition of the institution when Prince Damrong joined the committee. He obtained the services of Dr. Frankfurter, a Foreign Office official, who had devoted many years to the study of Siamese literature, arranged with the Treasury for an annual grant of money, cleared the building of the billiard tables and the light and valueless foreign books, and made the place a receptacle for all the Siamese literature which could be found, only just in time to save it from practical extinction. At the same time the curator placed himself in communication with the prominent dealers in Europe, whereby numerous valuable works on the history and archaeology of

Siam and neighbouring countries, on Buddhism and Brahmanism and on the ancient languages and customs of India with which Siam is so closely connected, have become the property of the library, making it an institution of real value in research, and one with which the libraries and literary societies abroad are glad to correspond.

In the year 1917 Dr. Frankfurter gave place to Professor Coedes, an accomplished linguist and one of the foremost living experts on all that pertains to the histories, archaeology and customs of the countries of Further India. With the assistance of this learned gentleman Prince Damrong has continued the development of the National Library, extending its influence with the educated public and making it a most efficient instrument in the awakening of the people to a knowledge of their native land, and to that proper pride in national institutions and traditions which is the root of all genuine patriotism.

The introduction of printing in the Siamese character has revolutionised the national literature. Reading has become a general accomplishment, a demand for reading matter has arisen and bookshops stocked with books have appeared to satisfy it. The historical works above referred to have been issued in many editions and placed within the reach of everybody, and selections from the fresh manuscripts collected by the National Library are edited from time to time and put into print for sale. A large number of the ancient fables and romances have been issued in popular editions, and these, with plays, songs and poems, can now be purchased at a trifling cost. The Educational Department has also done good work in compiling volumes of stories in prose and verse which have found favour with the public. All the laws, edicts and Government regulations at present in force are now to be had in print, the volumes edited by H.R.H. the

late Prince Rabi and by other legal luminaries, being obtainable at popular prices. Printing, in fact, has supplied a great incentive to the development of literature, and writing as a profession is beginning to be recognised as never before, and there is every sign that in this, as in other directions, Siam is on the threshold of a fateful change.

BIBLIOGRAPHY.

GENERAL.

It is probable that the earliest distinct reference to the country now called Siam, in any known record, is to be found in Ptolemy's Geography of Eastern Asia, dated in the second century, A.D., in which, as Gerini has shown, the very ancient kingdom of Sri Vichaiya is referred to under the name Samarade. But it is to the Chronicles of the Siu dynasty of China, put together about the year 650 A.D., that the student must turn for the first connected account of the country. Here, as again in the History of the Tang dynasty of China, compiled about 1060 A.D., there are set forth elaborate and detailed reports of the manners, customs and history of certain kingdoms with the monarchs of which the Emperors of China were in friendly relations. Some of these kingdoms have been identified, by the compilations of Ma Tuan Lin, with translations of the same by Hervy de Saint-Denys, De Rosny and others, and by the patient investigations of Gerini, as members of the group of States out of which Siam ultimately grew. Such Chronicles contain much general information which is found in some measure to corroborate, confirm and explain the main points of the local vernacular histories of these very early times.

It is impossible to overrate the importance to Siam of these Chinese records, the elucidation of which has to a great extent dispelled the mists surrounding a period of which it was thought until recently that no reliable record existed.

Of European books in the languages of Europe, mainly concerning Siam, there are none earlier than

the seventeenth century A.D. The mediæval travellers who found their way to the Far East and, on returning, gave to the world more or less succinct accounts of their wanderings in the form of dictated narrative or laboriously recorded journal, have little to say of the Peninsula of Further India and still less of Siam, and have left little recorded of the latter which is of much reliability or value.

The Portuguese conquests in India and the Far East during the sixteenth century A.D. had no lack of historians, who, since the scene of operations so often lay in Further India, had naturally a good deal to say of that region. They, however, embrace the activities of Portugal in all parts of the Orient, and though references to Siam are frequent, they are brief and not very informing. Such writers include Barros-é-Couto, (Juan de Barros was the historian of the earliest Portuguese adventurers. His seven *Decades* appeared at Venice in 1561 and were afterwards carried on by Diego de Couto until the History of Portuguese overseas adventure for 120 years had been recorded); also Camoens, the great Portuguese poet who, amidst the vicissitudes of his strange life, wrote the *Lusiad*, a great epic of exploration, in which the wanderings and the exploits of his countrymen during the sixteenth century are fully set forth. Later there came others whose business was not so much to record Portuguese feats of arms as to describe their own adventures, and of these the most prominent is Linschoten, a Dutchman who attempted something like an account of Siam, followed by others of various nationality, amongst whom Jaque, De Morga, Cocks, Caesar Frederick and Ralph Fitch may be mentioned.

In the seventeenth century A.D., when several European nations were beginning to take an interest in the trade of the East and Far East, a demand for information concerning oriental countries sprang up, and to meet it the merchants and their fellow travellers

the missionaries set themselves to compile accounts of the lands which they had visited. Siam had her share of these attentions. Early in the century a book dealing largely with Siam by F. Caron and Joost Schouten (Dutch) appeared and was eagerly read, being in fact translated into English, French, German, Swedish and Latin. Letters of the Jesuit Antonio Andrada, published at Madrid in 1639, contain information concerning Siam and some of her dependencies, and the *Historia Oriental de las Peregrinaciones* of Mendez Pinto (1645) have much to say of this country, which is sometimes referred to therein as "Sornao." In 1647 *An Historical Account of Siam*, written by Jeremie van Vliet, also a Dutchman, was produced and was translated into French within a few years of its publication. This work contains a somewhat rambling account of contemporary politics in Siam, but incidentally reveals a good deal concerning the manners and customs of the people which up to that time had never been recorded. References to Siam are not infrequent in French writings of this period, notably the *Relation des Missions des Evêques François aux Royaumes de Siam, de la Cochinchine et du Tonquin*, and other records of the French Roman Catholic Missions to the Far East, and, a little later, a much increased interest in the country was aroused in France and throughout Europe by the policy of Louis XIV in Further India, and a stream of literature on matters Siamese was set flowing which has continued, with more or less regularity, down to the present day. De L'Isle's *Relation Historique du Royaume de Siam*, a very valuable but now little-known work, appeared at Paris in 1684, and in the same year the *Relation de l'Ambassade de M. de Chaumont*, an envoy from Louis XIV to the King of Siam, was printed. A *Journal du Voyage de Siam* by the Abbé de Choisy, a Roman Catholic Missionary, was published in 1687, and was followed by the *Voyage du Comte de Forbin*

à Siam, the *Histoire Naturelle et Politique du Royaume de Siam* of Gervaise, Pere Tachard's *Voyage de Siam* and *Second Voyage*, and the *Déscription du Royaume de Siam* of De la Loubère, another French ambassador, all in 1688. De la Loubère's book bears all the signs of care and accuracy and contains much that is useful even at the present day. He avoided the political bias with which his contemporaries were usually afflicted, and his work, in consequence, appealed to a wider circle than did those of others, the book soon going into further editions in Paris, being also reprinted at Amsterdam and translated into English.

The Siamese revolution of 1688 A.D. practically closed the country to European foreigners for many years, a few missionaries alone persisting there and commerce with the West being entirely broken off. But the stirring events which destroyed French influence, terminated the romantic career of Faulkon and inaugurated a new dynasty, seem rather to have increased than diminished European interest in the country, for, during the remaining years of the seventeenth, and well into the eighteenth century, the revolution and the history of the European Chief Minister of the King of Siam formed the subjects of many books. Of the revolution, accounts appeared by Churchill in 1690 (London), by Désfarges, the Admiral who had led the French troops in Siam, in 1691 (Amsterdam), by Vollant des Verquains in 1691 (Lille), by Le Blanc in 1692 (Lyons), and by Frederik Haaring in 1692 (Leyden). *The Rise and Fall of Heer Constantyn Faulkon (A Concise Account)*, was printed at Amsterdam in 1690, Père d'Orleans wrote an account of the hero in 1754, and a panegyric on the same individual, from the pen of one Déslandes, appeared in 1756 (Amsterdam). Meanwhile the *Lettres Édifiantes, et Curieuses, Écrites des Missions Étrangères*, being volumes of the correspondence of the missionaries collected from all parts of the world, were appearing

during the eighteenth century, and these naturally contained much interesting matter relating to Siam, as well as the neighbouring countries of Further India, the scenes of the most active missionary enterprise. In the early years of the eighteenth century, a certain Dr. E. Kaempfer,* at one time Physician to a Dutch Embassy to Japan, wrote a history of his travels which contains a short but good account of Siam. The MS. of this work, written in Dutch, was bought after the author's death by Sir Hans Sloane, translated into English at his expense by one Scheuchzer, and published in that language in 1727. Its success was great and it appeared in Dutch in 1729, 1733 and 1758; in French in 1729, 1731, 1732; and in German in 1777.

In 1778, Turpin's *Histoire Civile et Naturelle du Royaume de Siam* appeared at Paris,* containing a fairly accurate account of the country and its inhabitants and evidently written with a view to arousing France to a resumption of her former political rôle in the Far East, in which object it failed, however, for, being written in a vein too anti-clerical for the period, it was suppressed (somewhat ineffectually it is true) shortly after its publication. In 1777 the lengthy and well-known *History of European Trade with the East and West Indies*, of the Abbé Raynal, containing many references to the commerce of Siam, was published in France and was soon translated into English, and, in 1823, one Lanier produced a *brochure* entitled *Étude Historique sur les Relations de la France et du Royaume de Siam, de 1662 à 1703*. •

The Anglo-Dutch wars, the founding of the Straits Settlements and the first troubles between the Hon. East India Company and Burma, aroused, in the opening years of the nineteenth century, a more active concern on the part of Great Britain in the politics of Further India than had hitherto been the case, and it is from this time that English writers appear and,

indeed, take a prominent place in the literature on Siam. In 1826 the *Journal* of Finlayson, the surgeon who accompanied the first English mission to Siam, was published, giving the earliest succinct account in English, at first hand, of the country and its inhabitants. This was followed in 1828 by the publication of the *Journal of an Embassy to Siam*, by John Crawford, the leader of a special mission, whose valuable information, collected with much care, was marred in the narrating by feelings of disappointment at the failure of his undertaking. In 1829 one Tomlin, probably a missionary, published at Singapore his *Diary*, kept on a voyage from Singapore to Siam and during a residence of nine months in that country.

The *Journal of Three Voyages along the Coast of China*, of Gutclaff, containing useful remarks on Siam, appeared about the same time, and the account by E. Roberts, United States Envoy, of his *Embassy to the Eastern Courts of Cochin China, Siam and Muscat*, was brought out at New York in 1837. Malcolm, another American, refers to Siam in his *Travels in South Eastern Asia* (Boston, 1838), and many articles on, or references to, the country appeared in various periodicals of this time, notably a paper by Captain James Low, *On the Government of Siam*, Asiatic Researches, Vol. xx, 2nd part (Calcutta, 1839).

The next book of any importance was D. E. Malloch's *Siam: Some General Remarks on its Productions*, published at Calcutta in 1852, and this was followed in the same year by J. A. Neale's *Narrative of a Residence at the Capital of the Kingdom of Siam*, written in a breezy, irresponsible manner and crammed full of evident inaccuracies and exaggerations, yet conveying a vivid impression of the life of European adventurers at the Siamese Court in the earlier half of last century. (The author went to Siam on a pleasure trip, entered the service of the navy, exchanged into

the cavalry, became aide-de-camp to the King, and fled the country during a cholera scare.)

The *Description du Royaume Thai ou Siam*, by Bishop Pallegoix, was published in Paris in 1854, and for many years was accepted as the most complete work on Siam, serving as a mine in which subsequent writers delved for information, more especially Bowring, whose book *The Kingdom and People of Siam*, appeared in 1858, shortly after his mission to Bangkok. A Romantic Biography called *Pauhlcon the Adventurer*, by W. Dalton, was published in London in 1862. *Travels in the Central Parts of Indo-China (Siam), Cambodia, Laos, etc.*, the diaries of the French traveller Mouhot, appeared in London in 1864 and in the same year De Rosny's *Études Asiatiques de Géographie et d'Histoire*, with many references to Siam, was published in Paris. In 1866, *A Two Month's Tour in Siam*, from the pen of one Thomson, a missionary, was printed in Singapore, the *Reisen in Siam in Jahre*, 1863, of Dr. A. Bastian, a most excellent and erudite work, appeared at Jena in 1867, and Mr. A. Grehan, an ex-consular official, produced his work, *Le Royaume de Siam*, in Paris in 1869.

Mrs. Leonowens, a lady to whom was entrusted the early education of His Majesty King Rama V, brought out a very interesting book, *The English Governess at the Siamese Court*, at Boston, U.S.A., in the year 1870 and followed it with *The Romance of Siamese Harem Life*, in 1873.

In 1871, *The Wheel of the Law*, of Alabaster appeared; a most valuable work, treating of the religious beliefs of the Siamese and comprising a large amount of information regarding national customs and ways of thought. In this year also, the missionary McDonald produced at Philadelphia a book called *Siam, Its Government, Manners, Customs, etc.*, a very excellent work which, though now scarce, is worthy of a front place on the shelves of a Siamese library.

The year 1873 was especially prolific in books on Siam. The record of the great work of Francis Garnier, *Voyage d'Exploration en Indo-Chine*, containing much new and useful information concerning Eastern Siam, and O'Farrell's *Siam au XX^me Siècle*, a forecast of the destiny of the State which has not yet been justified by events, appeared at Paris, while at London and New York respectively, *The Land of the White Elephant*, by Vincent, and *Siam, the Land of the White Elephant, as it was and is*, by Bacon, were published, all within a few months of each other. Commander Loftus of the Siamese navy published a volume of *Directions for Mariners in the Gulf of Siam*, in 1878. Mr. Ch. Lemire wrote an *Exposé Chronologique des Relations du Cambodge avec le Siam, L'Annam et La France*, which appeared at Paris in 1879. In 1880-81 S. J. Smith's *Extracts from Siamese History, Translated*, was published at Bangkok, and the *Bangkok Centennial* from the same pen appeared in 1882. In 1884 Carl Bock's *Temples and Elephants*, and Giburt's *La Famille Royale de Siam* were produced, and in the following year a work entitled *Ethnographie du Siam, le Peuple Siamois ou Thai*, by De Rosny was published at Paris. In 1885 a *Bibliography of Siam* was produced by Satow before the Royal Asiatic Society, Straits Branch, and was afterwards reprinted in book form. This contained a very complete list of works concerning, or having reference to, Siam, indicating much labour of research on the part of the compiler, and it has frequently been drawn upon in the compilation of subsequent works on the country, including this present volume. Mary Cort, an American missionary who had resided long amongst the Siamese people, published *Siam, or the Heart of Further India*, a sympathetic and well-written account of the country and its people, in 1886, in which year also appeared Mrs. Grindrod's *Siam, a Geographical Survey*. Amongst the *Sikhs*, a work by A. R. Colquhoun, containing frequent references to,

and remarks upon, Northern Siam, also appeared in 1886.

The year 1890 saw the appearance of Anderson's *English Intercourse with Siam in the 17th Century*, and Holt Hallet's *A Thousand Miles on an Elephant in the Shan States*, two works of much value, each in its peculiar way. Gerini, a writer whose works should be in the possession of every student of Siam, published *The Chulakantamangala, or the Tonsure Ceremony as performed in Siam*, in 1893, his work in the vernacular on the Art of War as practised in Siam having shortly preceded it. In that year also *Die Geschichte der Siamesen*, by Conrady, appeared in Leipzig, and Prince Henry of Orleans gave to the world an interesting narrative of his travels in the Far East, in the volume *Autour du Tonquin et Siam*, a work which was printed in English soon after its first appearance.

(Sir) Henry Norman produced his well-known work *The Far East*, in 1894, a considerable part of which was devoted to Siam, of which kingdom he had little good to say, viewing it with a curiously pessimistic eye and prophesying for it an early downfall which has fortunately been avoided. In 1896, *Notes of a Journey on the Upper Mekong, Siam*, by H. Warington Smyth, was published by the Royal Geographical Society, and in 1898 there appeared from the pen of the same author, *Journeys on the Siamese East Coast*, and *Five years in Siam*, the last a record of work and travel in all parts of the kingdom, revealing the impressions of an accurate observer with a broad-minded capacity for sympathy with thoughts and ideals other than his own. In this year, also, appeared *The Kingdom of the Yellow Robe*, by E. Young, a collection of bright little sketches of Siamese manners and customs, more especially in Bangkok and the suburbs. Several editions of this book have been issued, and it still finds many readers, though, with the very rapid development of Siam within the last twenty years,

it is in many respects out of date. In 1899 a little book entitled *Laos Folk Tales*, by Katherine Fleeson, was published at New York, being a series of stories gathered by the author during many years' residence as a missionary in Northern Siam. A certain M. Vos, a Belgian gentleman, visited Siam in 1900, and shortly afterwards issued a little book called *Croquis Siamois*, a series of lively and accurate sketches of the everyday matters which met his view during the short time of his stay in Bangkok. *Surveying and Exploring in Siam*, by James McCarthy, a valuable record of travel and observation covering ground which, at the time it was made, was practically unknown to Europeans, was published by the Royal Geographical Society in 1902, the book having for some time previously been in private circulation. In 1902 also, a work called *Siam in the Twentieth Century*, by J. G. D. Campbell, was published by Arnold in London, the author having been for two years in the Siamese Government Service. The book is exceedingly well written, but the writer's knowledge of his subject is perhaps not equal to that which he has of the English language.

The *Études Diverses* of the *Mission Pavie*, which appeared in Paris in parts during the period 1892-1902, contain much extremely valuable information on Siamese history and archaeology, resulting from the labours of M. Pavie and a band of enthusiastic compatriots. Two works named *Le Siam Ancien*, one of Fournereau published, under the auspices of the *Musée Guimet* at Paris, and the other by Commandant Aymonier of the French Service, appeared together in 1903 when, also, was printed at Bangkok, *A Brief History of the Roman Catholic Mission in Siam*, by a writer who concealed his identity under the *nom de plume* Pinya. Lemier reappears also in 1903 with *La France et le Siam*, containing his views on the questions then at issue between the two countries.

In 1904, *The Kingdom of Siam*, to which various

writers contributed under the editorship of A. Cecil Carter, was published in New York in connection with the Siam exhibit at the St. Louis World's Fair. Clifford's *Exploration of Further India*, in which is to be found much concerning Siam, also appeared in that year. •

An amusing book called *Au Siam*, by E. Jottrand, and a somewhat superficial one called *Les Siamois Chez Eux*, by a certain Mr. Poskin, were published in 1905, the former being the reflections of a Belgian gentleman at one time in the service of Siam, and those of his wife, and the latter a 'pot-boiler' compiled largely from the writings of others.

In 1906 Gerini reappears with a most valuable and instructive treatise on *Siam's Intercourse with China*, an erudite work which has done more than almost any other to throw light on the ancient history of the country. *Le Siam et les Siamois*, by De La Jonquière, a truthful and concise little book, was published in Paris in 1906, when a re-issue of Scheuchzer's *Kaempfer* also appeared. The fourth publication of this year dealing with Siam was *Lotus Land*, by P. A. Thompson, formerly of the Siamese Survey Department, a delightful book showing insight, sympathy and the gift of observation, and to read which is undiluted pleasure.

Die Landwirtschaft in Siam, by H.R.H. Phra Ong Chao Dilock, *The Nearer and Farther East*, by Zweener and Brown, and *Twentieth Century Impressions of Siam*, by Messrs. Wright and Breakspear, appeared in 1908. The first is an able treatise on the rural and agricultural conditions of the author's native land; of the second, a small part only is devoted to Siam; the third, which has been aptly termed "Siam while you Wait," is an admirable compendium of advertisements with which a few crumbs of general information are mingled.

In 1908 there was published, under the auspices of the National Library at Bangkok, a reprint of

Colonel James Low's translation of the Keddah Annals, a work containing matter which at that time had much political significance for Siam. In 1912 appeared the first and second editions of this book, under the title *Siam, a Handbook of Practical, Commercial and Political Information*, and in 1913 the Siam Observer Press published in book form two collections of articles, called respectively *A Siam Miscellany* and *Clogs on Our Wheels*, very able lay sermons to the Siamese on national politics and deportment, by one of that nation whose exalted identity was imperfectly veiled behind the pseudonym "Asvabahu."

WORKS ON THE SIAMESE LANGUAGE.

The list of works on the Siamese language by foreigners is not a long one. De La Loubère (1688) was the first writer on the country who gave any serious attention to the matter. Long afterwards, in the year 1810, there appeared at Serampore (Mission Press) *A Comparative Vocabulary of the Burma, Malayu and Thai Languages*, by Leyden, a work which is now of more value as a curiosity than as a guide to learning. Captain Low published a *Grammar of the Thai or Siamese Language* in 1828, and J. T. Jones, a missionary, produced his *Brief Grammatical Notices of the Siamese Language* in 1842. Bishop Pallegoix in 1850 printed a *Grammatica Linguae Thai* at Bangkok, a really useful work, and followed it in 1854 with his *Dictionarium Linguae Thai sive Siamensis, Interpretatione Latina, Gallica et Anglica*, a large volume, evidently the work of many years, which, though perhaps a little out of date now, is still considered the best Siamese dictionary ever compiled, and of which a new edition was not long ago edited by the late Bishop Vey. At Berlin in the year 1856 there appeared *Ueber die sogenannten Indochinesischen Sprachen*

insonderheit das Siamesische, by W. Schott, and in 1870 Bastian published *Sprachvergleichende Studien mit besonderer Berücksichtigung der Indo-Chinesischen Sprachen*, much of which dealt in a masterly manner with the Siamese language. Other works which have appeared from time to time are Ewald's *Grammatik der T'ai oder Siamesischen Sprache*, Leipzig; Vershoven's *Lehr und Lesebuch der Siamesischen Sprache*, Leipzig; S. J. Smith's *The Principles of Siamese Grammar*, Bangkok, 1889, and M'Farland's *An English-Siamese Pronouncing Handbook*. The last of these was originally prepared by Dr. W. H. M'Farland, one of the pioneers of American Presbyterian Missionary work in Siam, but it has recently been revised and modernised by his son, Dr. S. G. M'Farland, probably the first authority amongst foreigners on the Siamese language as spoken at the present day. A very useful Siamese-English dictionary was compiled by E. B. Mitchell in 1892, but this is now difficult to obtain and is perhaps not so convenient for the use of students as is a similar but fuller and more up to date work by M'Farland. In the year 1900, a book entitled *Elements of Siamese Grammar, with Appendices*, was produced by Dr. O. Frankfurter, which, though bearing the comparatively humble title of 'Grammar' is in reality a very learned treatise on the language, its construction and its history, embodying the results of many years of close study and unwearying research. While practically useless as a handbook for the foreigner who may wish to acquire such knowledge of the language as may be useful in everyday life, a purpose for which the author indeed explains that his work is not intended, this book is one of the highest importance to any one desirous of penetrating to the depths of the subject, and is without doubt the most valuable contribution to the study of the Siamese language that has yet been made.

Cartwright's Siamese Grammar published in 1905 (Bangkok) is probably the best aid to learning the language which has yet been produced.

PERIODICALS AND NEWSPAPERS.

It is impossible to enumerate all the papers and articles dealing with Siam that have appeared from time to time in the pages of European magazines and other periodicals, but mention may be made of *The Journal of the Indian Archipelago and Eastern Asia*, 1847-1863, in which frequent references to this country were made; of *The Phoenix*, a short-lived magazine devoted to Eastern subjects, which ran through a few years of the 'seventies' of the nineteenth century and contained some interesting papers on Siamese literature. Also of the *Journal of the Straits Branch of the Royal Asiatic Society*, amongst the numerous volumes of which are included papers by Leyden on Siamese Literature, by Satow on the Bibliography of Siam, by Dakin on travels in Eastern Siam, by Flower on the Natural History of the country, and many others. In the *Journal of the Royal Society of Arts*, also, there are occasional papers on various Siamese subjects. The *Journal of the Siam Society*, which began its career in 1904, contains many very interesting contributions from both Siamese and Europeans of various nationality, dealing with the history, ethnology, archaeology, natural history, arts, customs and literature of the country. It is published at Bangkok in English, and is a veritable mine of information to any one interested in the country. The *Journal of the Natural History Society of Siam*, an ably managed publication of widely established reputation, is in course of becoming an exceedingly valuable record of the Flora and Fauna of the country, and of work done by a devoted band of amateurs in a department of Science that has appar-

ently been regarded hitherto by all but a very few persons in Siam as quite unworthy of serious attention.

So far back as 1858, annual compilations of the *Directory* order have been published at Bangkok in the English language. The first of these was *The Bangkok Calendar*, produced by Mr. Bradley, whose descendants still carry on the publishing house which he started on the banks of the Menam Chao Phaya. The *Calendar* continued until 1873. In 1869, S. J. Smith printed the first number of his *Siam Repository*, which appeared annually until 1874. There then occurred a gap of four years, at the end of which time the *Repository* reappeared under the title *The Bangkok Directory*, and this was conducted by S. J. Smith until well on in the eighties, when it was taken over by the Bangkok Times Press, since when it has appeared as *The Directory for Bangkok and Siam*, a publication that consists not only of a very complete directory for the country, but also a mass of general information which makes it a most useful and instructive volume. *The Siam Directory*, which made its first appearance a few years ago, is modelled on the lines of *The Directory for Bangkok and Siam* and is also a useful volume.

In the year 1916 the Government Department of Statistics issued the first number of a *Statistical Year Book* a useful compendium of fiscal and general statistics, and in 1921 there was inaugurated a quarterly journal, or *Record*, of the Government Board of Development, published in Siamese and English and designed more or less after the London Board of Trade Journal.

Journalism is at present represented in Siam by three daily papers, *The Bangkok Times*, *The Siam Observer* and *The Bangkok Daily Mail*, all printed in English and Siamese, *The Chino-Siamese Daily News* and *The Kew Sing Daily News*, printed in Chinese and Siamese, and the *Nangsue Pim Thai* and the *Siam Rat*, printed daily, in Siamese. Recently there has been

an efflorescence of Siamese evening papers, some daily and others weekly, that are sold by newsboys in the streets, at the railway-stations and in the cinema halls. Individually their career is usually brief, as they are, in most instances, run by ex-officials who, having been discharged for malpractices, are naturally against the Government, and utter criticisms of those in high places that bring about their speedy suppression. Collectively, however, the evening press tends rather to increase, for there is always some one with a public or private grievance and with access to a cheap hand-press, to fill the gaps made by casualties. The *Government Gazette*, which is published weekly in Siamese, chronicles the doings of the Court, the promotions, transfers, etc., of officers in Government service, and is the vehicle for the official promulgation of new laws, orders and notifications.

GOVERNMENT.

It has already been said that the King of Siam possesses over his people and country a power of the most absolute description, but that, while very particular regarding the full recognition of such power, His Majesty very seldom actually wields it in person except in accordance with the constitutional arrangements under which the government of the country is now conducted. In the time of the six Chief Ministers and Councillors of the Right and Left, a period which extended from the days of Sawankalok-Sukhothai glory, right down to some thirty odd years ago, the actual details of the administration, such as it was, were in the hands of the Sovereign himself, the ministers being no more than the messengers and mouthpieces of their master. Occasionally there arose a statesman or a general of such character as to become in a measure the adviser and the confidant of His Majesty, and sometimes also the occupant of the throne was a *roi fainéant* who allowed the reins of government to slip from his hands into those of his chief officers, to his own undoing ; but usually the power of ministers was much circumscribed and they had very little voice indeed in the ordering of matters, great or small, connected with the administration. In the reign of King Rama IV, slight changes were made, with the intention of allowing a measure of power to the great officers of the state, but these were not productive of much good effect, and in the early years of the last reign it became evident that the needs of the country had altogether outgrown the old system and that a distribution of work amongst persons competent to administer and to advise was absolutely necessary unless further progress and development were to be seriously hampered.

In the year 1892, therefore, ten chief Departments of State were created to take the place of the old military and civil Right and Left divisions, the Ministers in charge of which should form a Cabinet wherein all matters of government should be debated. The departments were for Foreign Affairs, War, Interior, Finance, Royal Household, Justice, Public Works, Public Instruction, Agriculture, and the Ministry of the Capital. Since then, from time to time slight alterations have been made in the Cabinet which, in 1922, consisted of twelve members, Marine, Lord Privy Seal and Commerce having been added to the original list of permanent offices and the Ministry of the Capital merged in the Ministry for the Interior. The ministers are all of equal official rank and the Sovereign presides at their meetings, acting as his own Prime Minister and reserving the right of veto. The Cabinet sat regularly from the date of its inception until the year 1910, and the measures which so much contributed to the conspicuous advance of the country in the last reign were fully discussed by it before being allowed to become law. Latterly the regular meetings have been discontinued, the Cabinet has met when specially summoned for reasons of high importance, and measures connected with the ordinary business of administration have been attended to by the King himself, usually with the advice of the individual minister responsible.

Besides the Cabinet there is a Council (*Ōng Montri*), somewhat similar to the British Privy Council, which comprises the most influential men in the country or such of them as enjoy, or have enjoyed, the Royal favour. The Council meets when commanded, to deliberate and advise concerning affairs of State.

Under the ministries thus formed, the various branches of the administration have been grouped, each with its own staff of officers presided over by a chief, or director, responsible to the minister, who in

turn is responsible to the king. Many of these departments were, of course, already in existence in some form or other under the old arrangement, but all required and received considerable reorganisation and many new offices have, from time to time, been created to keep pace with increasing requirements.

Under the old order an extensive and intricate system of official titles existed, by which the holders of various offices were graded and designated. Every office of any importance carried a title consisting of words, usually of the Pali language, having more or less direct reference to the office and to the official duties of the holder, prefixed to which words was one which denoted the rank attaching to the office. Such an official title, on being assumed by a man, became practically his name, for he was in future known by it alone, that which he originally bore falling altogether into disuse and being very likely forgotten in time by all except his intimates. An officer once appointed was never degraded except for the very worst offences and hence, unless he were promoted, he retained his title to the end of his life. Official incapacity or senility might cause his compulsory withdrawal from active work, but in such case he retained his title and nominally his office, which could not be filled until after his death. The higher officials were ranked in five main grades, Somdet Chao Phya, Chao Phaya, Phaya, Phra and Luang with three special grades Chao Mun, Cha Mun and Cha for the officers of the Corps of Royal Pages. Further subdivisions of these grades were distinguished by purely nominal rights over rice lands, called *sakdi*, which were attached to each appointment, and the amount of which varied from 400 (or from 300 in the case of the Corps of Royal Pages) up to 10,000 rai, a rai being the unit of land-measure and equal to two-fifths of an acre; while yet further subdivisions were indicated by the giving of insignia, such as a golden betel-box or a state

palanquin as special marks of distinction. Below these grades were others, *Khun*, *Mün*, *Kamnan* and *Pantanai*, petty officials who received no patent of nobility with their appointments, and who frequently held their titles not from the king but from the chief of a province, their offices bearing the same relation to him as did those of the high officers of state to the king.

The reorganisation of the services was the signal for a "general post" amongst officials. Many ancient and time-honoured offices went into abeyance, while others which had hitherto had no place in the scheme of government now came into existence. So far as possible the old officials were fitted into the organised offices, but many of the senior men, unable to adapt themselves to new ways, retired into private life, retaining only their titles and leaving to younger officers the task of dealing with the new-fangled notions of government, though the new-comers could not assume the official title belonging to the office during the lifetime of the former incumbent. Thus the old official order became confused, and though, as the elders died off, their titles were in most cases conferred upon the actual holders of office, yet the invention of new titles for new appointments and the frequent promotions, transfers and, be it added, reductions and dismissals entailed by the new system, made it impossible to adhere to an arrangement which depended entirely upon the inseparability of the man and his office.

THE MINISTRY OF FOREIGN AFFAIRS.

At the time when her machinery of government was reorganised, Siam was entering upon a new phase in her relations with the outside world, the chief phenomena of which were a rapid increase in the number of foreigners resorting to the country for purposes of trade, and the advance of the French

towards the River Mekhông on her eastern borders. The former of these very naturally brought into prominence all questions relating to the treaty rights of foreign subjects, greatly to the increase of business between the representatives of Foreign Powers and the Government, while the latter presented Siam with a series of problems concerning foreign affairs which she had never before encountered and which, it could be seen, threatened her with national disaster unless considered with the utmost care and circumspection. Thus, the reorganised Ministry of Foreign Affairs, which was placed under the guidance of H.R.H. Prince Devawongse, a half-brother of King Rama V, and consequently uncle to His Present Majesty, found itself early embarked on troubled waters and, though the Minister obtained the assistance of a Belgian gentleman, an eminent international lawyer and ex-minister of State of his own country, as his adviser, it was then and for some years to come, only with the greatest difficulty and with many hairbreadth escapes, that a clear course was steered. In dealing with the rapid advance of the French on the east and the determined claims to Siamese territory which were put forward by that Power, an unfortunate policy was adopted, the minister and his adviser placing too much reliance on the undoubted legal rights of Siam in the matter and overlooking, until almost too late, the possibility of a disregard of right and a resort to sheer force by her opponents in order to secure the realisation of cherished schemes of colonial aggrandisement. Though actual collisions occurred between the armed forces of the disputants, a state of war was avoided, probably owing to French uncertainty as to the attitude of England in the matter, but Siam lost territory and prestige, and a situation of most unpleasant tension was established in which the French appeared determined to find, in the fancied ill-treatment of French subjects in Siam, a pretext for

further aggression, while the energies of the Siamese Foreign Office were continually absorbed in refuting charges of neglect of treaty obligations brought against all departments of the administration.

Subsequent to the first tour of His Majesty King Rama V in Europe, diplomatic relations with the outside world were considerably extended, a Siamese legation was established at St. Petersburg (Petrograd) in addition to those at London, Paris, Berlin and Washington, and at the same time a Russian representative was received at Bangkok, where he essayed for some time to influence the politics of the country but ultimately retired into the background. About this time also diplomatic relations were established with Japan, a Siamese representative being appointed to Tokyo and a Japanese Legation established at Bangkok, an arrangement by which Siam has benefited in more ways than one.

The Belgian adviser having retired to Europe after his policy has been pursued for some ten years, His Majesty's Government found his successor in a Professor of Law at the University of Harvard, a gentleman of long experience in the diplomatic service of the United States of America. The choice could scarcely have been more fortunate. The adviser with singular insight discovered at once the weak points in the former policy, and set himself to the task of correcting past errors and of repairing the damage which the State had suffered by them. The Foreign Representatives in Bangkok were not slow to perceive the change, and H.R.H. the Minister was soon enabled to bring about more cordial relations with them than had ever existed before, the principal results of which were an understanding with France and the settlement of all difficulties with that nation, the unreserved recognition of several laws affecting both Siamese and foreigners which Siam had long desired to introduce, but which, for various reasons, had been opposed by the Powers,

and the active co-operation of the foreign consuls in the enforcing of such laws. But the crowning achievement of the new policy was a revision of the treaties with England and with France, by which revision subjects of those Powers were brought under the jurisdiction of the laws of Siam. The adviser died in the spring of 1908, leaving unfinished many of the schemes which had been brought forward for the improvement of the Government during the four and a half years that he had been in Siam; schemes affecting not only the Department of Foreign Affairs but many other branches of the administration. Since then the office of Foreign Adviser has passed in succession to three American gentlemen of the legal profession with whose assistance the Foreign Minister pursued and elaborated his policy with signal success, Denmark and the United States of America having followed the example of England and France in surrendering their extra-territorial rights so that, the old treaties with the Central Powers of Europe and with Russia having disappeared, the end of the extra-territorial system may be said to be well in sight. In 1921 H.R.H. Prince Devawongse completed the thirtieth year of his uninterrupted service as Minister of Foreign Affairs, a record which in any country would be no small accomplishment, but which argues in Siam, where a public career of any kind is liable to quite peculiar vicissitudes, the possession of political acumen and ability of a very high order. His death in 1923 after a brief illness was deeply deplored by the whole nation, His Majesty placing on record in a Gazette Extraordinary his sorrow for the loss of a revered relative and a trusted adviser. His son, who had long been in training in the Department, was appointed to the vacant portfolio.

THE MINISTRY OF WAR.

Although the inhabitants of Further India are not, and apparently never were, remarkable for very war-

like qualities, their geographical situation and their politics have caused them from time immemorial to be continually engaged in war. The whole sub-continent is strewn with the remains of cities sacked and destroyed during struggles for supremacy between kingdom and kingdom, while of the existing towns there are few of more than the most modern growth, which have not at one time or another endured the pains and privations of a siege. The art of war, as anciently practised by the Burmese, Siamese, Kambodians, Mons and other more or less allied families and races, was identical with all of them in detail, as well as in general principle. The chief points always kept in view were, to attack only when in superior numbers, to advance, when in the face of the enemy, by a series of stockaded positions, and to risk encounter in the open as seldom as possible, and then only if a safe line of retreat were open. Finally to count time as of no object at all, but whenever possible to rely for ultimate victory upon moral disorganisation wrought by long suspense in the ranks of the enemy, for the further promotion of which many devices were employed, such as the exhibition at a distance of an apparently overwhelming strength, incessant firing of guns, beating of gongs and the making of other fear-inspiring warlike noises. Whole armies frequently lay within hail of each other for days and weeks, contenting themselves with the interchange of taunts and scurrilous jests, while occasionally a campaign would be decided by an encounter of champions, held in full view of both sides. So long as the issue remained at all doubtful, ruthless massacre of the general population of an invaded territory was the rule, but when complete victory had been established, all but the most important persons, whether combatants or non-combatants, were generally spared to be carried into captivity. Horrible tortures were employed in the moment of victory, but, except as the result of complete

surprise, massacres of combatants were seldom very extensive, as an army, when once disorganisation had set in, showed considerable agility in removing itself beyond the reach of the foe, while, from fear of ambush, pursuit was always diffident and slow. Such details as discipline, pay, and commissariat had little or no place in the calculations of commanders. The troops with very few exceptions consisted of raw, untrained levies summoned from the country districts or taken by pressgangs; a few weapons were provided by the State but the majority of the soldiers had to find their own arms, which were consequently of various kinds; the chance of loot afforded the only prospect of pay, and the food consisted of what the men could forage for themselves in the country districts contiguous to the scene of operations. Armies consisted mainly of infantry, but, in the wars of the more powerful nations, small bodies of cavalry were used, while the commanders always went into battle mounted on elephants. Amongst the wilder of the more or less independent tribes beyond the northern frontiers of the Burma and Siam, war according to these principles is still the frequent occupation of the months which follow the harvesting of the rice-crops, but in the more civilised communities of the south it has quite gone out of fashion. The last military expedition undertaken by Siam under the old conditions was against the Shan State of Keng Tung in the reign of King Rama IV.

A small number of regular soldiers, that is, of troops maintained in peace-time in addition to the irregular levies raised for war, has always formed part of the appanage of Siamese Royalty and, as was often the custom at the courts of other despots not too well assured of the loyalty of their own people, this standing army, or rather the best part of it, was sometimes composed of foreign mercenaries, the body-guard of the kings of Ayuthia having been at one time composed of Malays and other Mohammedans, at another of

Japanese, and at yet another of Europeans, the last being, however, an institution of very brief duration. Usually the main body of the permanent forces was recruited from the captives taken in war and their descendants, and gradually it became a fixed rule that all such, and eventually all Malays, Mônns and Annamese living in Siam, were told off for service in the army and navy, each individual passing four months of every year on duty, during which period he received a wage just sufficient to provide him with the coarsest food. This form of *corvée*, to which some obloquy attached, was cordially detested by all those who were bound to it, and when, in course of time, efforts were made to introduce the elements of discipline and some slight knowledge of military duty, it was found that the system was useless for purposes of training and that the men provided by it were sullen and unteachable and without the smallest particle of military spirit. It was also found that the numbers so obtained were quite insufficient for anything but a skeleton force. The Government, however, persisted for many years in an attempt to make the old system suffice for modern requirements with, so far at least as the navy was concerned, some slight outside appearance of success. But on the few occasions when the fighting capacity of the forces was put to the test, the system broke down hopelessly and, after local disturbances which occurred in 1902 in the east and north of the kingdom had been put down only with great difficulty, it became abundantly evident that without complete reorganisation and fundamental alteration of method, Siam could never aspire to the possession of military and naval forces likely to be anything but a useless burden to her.

The return home of several young princes who had received military education in Europe and who naturally burned with the desire to see the country possessed of a serviceable army and navy, ensured

the serious consideration of the problem by the Government, with the result that in the year 1904 the ancient right of the Crown to the services of every able-bodied man in the country for military purposes, was resuscitated by a Law of Conscription extending the liability for service in the army or navy during peacetime to all the adult inhabitants of the kingdom, subject to such exemptions as are usually granted under similar conditions elsewhere. This law, in which the country is considered as a number of military divisions, was at first brought into force in one division only and after a period of successful experiment, was extended until it now embraces the whole of the kingdom. The civil district authorities annually provide the military with lists of the youths who have reached twenty-one years, the age for enlistment. From these the number of men required is selected and the residue is drafted into the reserves, after further selections have been made for the police and gendarmerie services. The payment of rates and taxes above a certain sum carries exemption from liability to serve, and at first many people endowed their sons with land and other property in order that they might escape, but the practice ceased when the fathers and mothers at length discovered that the ancient stigma no longer attached to military service; that the discipline of a modern soldier's life meant neither torture nor degradation but was in fact, the best thing in the world for their sons; and finally that for the old people to dispossess themselves of their property in favour of their, possibly thankless and probably spendthrift, progeny, was directly to invite disaster. The personnel of the higher grades of both services was quite as much in need of reform as was that of the rank and file, and duly received the attention it demanded. The cadet schools, hitherto worse than useless, were entirely reorganised, and instructors, under the influence of the new enthusiasm, before long showed signs of being alive to the true nature of their

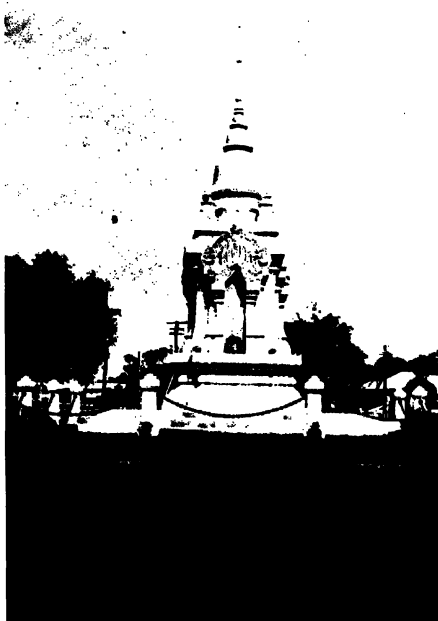
functions and began to instruct their pupils in military subjects and to aim at imbuing them with some degree of military spirit.

Closely associated with the military reforms of Siam must always be the names of their Royal Highnesses the late Prince of Nakon Chai Sri, the late Prince of Pitsanulok and the Prince of Nakon Sawan. The first two, who may be said to have been the creators of the modern Siamese army, held the position of Chief of the General Staff in succession, and devoted practically the whole of their short lives to the service of their creature. The third, trained in early youth in the armies of continental Europe, after devoting fifteen years to the navy, followed his brothers in the chief command of the army, to which he has devoted himself with an ardour equal to that of his predecessors.

The late Colonel Gerini, the well-known authority on Further Indian history, archaeology and religion, was for many years identified with the education of the Siamese military officers, and much of the peculiar spirit which informs that class to-day is doubtless due to precepts inculcated by him.

The army as at present constituted consists of three Army Corps of three Divisions each, one Independent Division, and sundry Army Troops included for administration in the 1st Army Corps. The units comprised in the above are 25 infantry, 6 cavalry, 10 artillery and 3 engineer regiments, with medical transport and other service units. There is also a small but exceedingly efficient Flying Corps. The whole Force numbers about 30,000 men with the colours and, on full mobilisation, to upwards of 100,000 of all ranks.

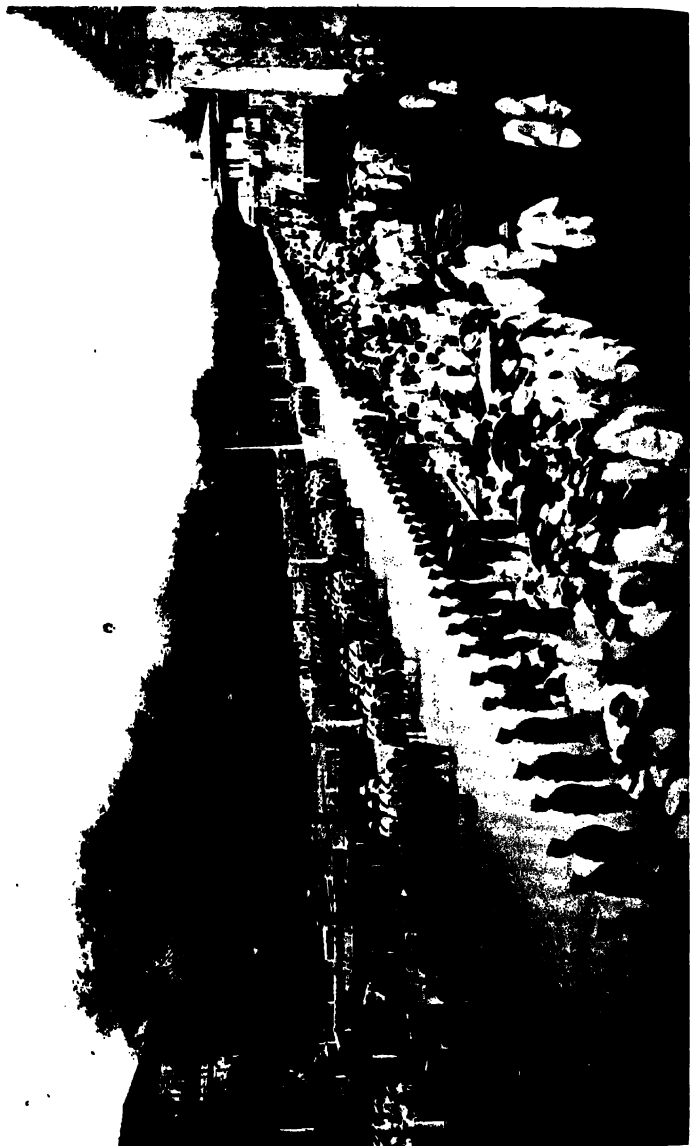
The Siamese army contains no European or other foreign officers. Indeed, with the exception of the contributions of Colonel Gerini, the army as at present organised (considered by the Siamese to be the most successful of their modern institutions) is the work of their own unaided hands.



MONUMENT IN BANGKOK ENCLOSING THE ASHES OF SIAMESE
SOLDIERS WHO DIED IN FRANCE.



THE WAR OFFICE, BANGKOK.



The infantry is armed with a magazine rifle of recent pattern and a short bayonet, the cavalry carry a magazine carbine and a sword, and the artillerymen are also armed with a carbine. Field and mountain guns of seven centimetre calibre are the only ordnance at present used by the artillery, these having been found suitable for the peculiar transport conditions which prevail. The army uniform consists of a grey tunic and dark blue overalls and blue, red or yellow facings, and when on service, each man carries a knapsack, the contents of which are well adapted to local requirements. On service in Europe during the war, the Siam Expeditionary Force wore a khaki uniform closely resembling that of the British army, which is now the regulation service kit.

Two years with the colours and subsequent enrolment in the first or second reserves are obligatory on all men enlisted. Each man serves in the military district of which he is a native, and arrangements exist whereby he may obtain leave during the ploughing and reaping seasons. He also receives partial exemption from taxation while in the army. Amongst the young men of the outlying and more unsophisticated districts, military service, the fear of the unknown having been surmounted, is so popular that no compulsion is needed to obtain the men required; but at the capital and in the more civilised parts of the country service is avoided if possible. The offices of the General Staff are situated in a commodious building at Bangkok, and excellent barrack accommodation is supplied both there and at all other places where troops are permanently quartered.

There are those who consider that the geographical and political situation of Siam renders it improbable that such an army as she may be able to create can ever be of much use to her, and that the material at her disposal is not the stuff from which good soldiers can be made. But there is no doubt that as a school

of training and as a safeguard of internal peace and order, the maintenance of armed forces sufficient adequately to reinforce the gendarmerie and police is not only desirable but absolutely necessary whatever may be the nature and extent of their foreign political value. Moreover, the working of the military law as exemplified by the smart appearance and orderly behaviour of the men concentrated in Bangkok for the periodical reviews held there, is calculated to astonish the sceptics and to upset all their theories, and encourages the belief that, under good organisation, the Siamese peasant may be turned into a good soldier, although, the Siam Expeditionary Force to France notwithstanding, it cannot yet be said that he has proved his fighting worth in the field.

Self-defence, the preservation of internal order, discipline (more especially amongst the officer class), and the dignity of the Crown, are all arguments strongly urging the maintenance of serviceable warlike forces, and provided she can afford to do so, there appears no good reason why Siam should not place her army and navy on such a footing as may seem best to her. And one invincible argument in favour of her army lies in the fact that without it she could not have come into line with the Allies in the Great War and therefore would have missed an absolutely unique opportunity for the consolidation of her world position, an opportunity of which, be it said, she has taken the fullest advantage.

The question of funds^o is, however, a difficulty. There are many demands upon her purse, and irrigation, improvements of communications and other works tending to the development of her natural resources, are of the utmost immediate importance if her future welfare is to be assured. At present she is trying to finance her economic reforms and to build up a strong war machine at one and the same time, and there are signs of an inclination to starve the



TROOPS OF THE SIAM EXPEDITIONARY FORCE.
(Returned from France, 1919)

former for the benefit of the latter. But, as she lives up to the outside edge of her income, she must, of course, be aware that without economic development there can be no increase of funds for military, or indeed for any other, purposes, and hence it is to be presumed that those most in favour of military progress will be amongst the last to grudge a proportionately heavy expenditure in the near future on public works of a renumorative nature.

THE MINISTRY OF MARINE.

In the eighteenth century and the earlier part of the nineteenth, the King of Siam possessed a number of sailing ships which were used chiefly for purposes of trade, but which, on occasion, served also for war. It is recorded that they took part in operations against the Malays off Kedah in 1838 and that they were used to carry troops in the war with Kambodia in 1841, but they do not appear ever to have formed a marine fighting force in the usual acceptation of the term.

The present navy may be said to have had its beginning with the purchase of certain ancient steamboats for use as royal yachts and dispatch boats, in the last quarter of the nineteenth century, which vessels, when they came under the command of the energetic Captain (afterwards Admiral) de Richelieu, a Dane, were gradually replaced by a squadron consisting of an armoured cruiser converted into a Royal Yacht and six small steel screw gunboats, the whole carrying between seventy and eighty guns of 4·7 inches calibre or less.

During the *régime* of Admiral de Richelieu the navy was officered chiefly by Danes and Norwegians, seconded from the Marine Services of their own countries, but after his retirement in 1903 these were replaced by Siamese educated in foreign navies or in the naval cadet college at Bangkok. The material of

the Navy was also gradually changed. The Cruiser, in which His Majesty King Rama V had travelled to Europe in 1897 to take part in the naval review on the occasion of Queen Victoria's Diamond Jubilee, was sold and its place taken by a brand-new Royal Yacht, built in Japan and replete with every conceivable luxury, while the graceful, though more or less useless, steel gunboats were superseded by ugly but serviceable destroyers and torpedo-boats. On the declaration of war against Germany in 1917, twenty-five German ships lying in the Menam were seized and, being condemned by the Prize Court, were added to the Navy. Of these some were afterwards transferred to a Siamese Mercantile Shipping Company and several were added to the naval transport flotilla.

In 1920 the King bought, with money subscribed by the people, a Thornycroft-built ship of the latest pattern of Destroyer Leader, and this when handed over to the Navy made a very considerable addition to the strength of that service.

Three forts near the mouth of the river Menam Chao Phaya are under the control of the Navy, and at Bangkok is situated an arsenal and dockyard containing the Admiralty offices, barracks, a dock capable of accommodating the largest ship in the Navy, slipways, sheers, and workshops. The personnel of the Navy includes, besides the crews of the ships, five thousand marine infantry, who provide garrisons for the river forts, and there is a naval reserve of some 20,000 men. With the exception of occasional visits to the Straits Settlements and to Hongkong, the fleet is usually confined to home waters, Puket on the west coast of the Malay Peninsula and Chantabun on the eastern shore of the Gulf of Siam, being the stations most frequently visited.

From 1903 to 1920 the Royal Navy was under the chief command of His Royal Highness the Prince of Nakon Sawan, from whom, when he succeeded his late

brother as Chief of the Staff of the Army, it passed to the Prince of Chumporn and, at his death, in 1923, to H.R.H. Prince Asadang, brother of the King.

MINISTRY OF THE INTERIOR.

Under the old *régime* the interior of Siam was divided into a large number of provinces or *Muang*, the general administration of which was in the hands of the chief or *Chao Muang* whose office, subject to the will of the sovereign, was hereditary. In theory the power of the chief was circumscribed, but in practice, more especially in the more distant provinces, he was subject to very slight control. In fact the authority of the King varied inversely with the distance from the capital, the chiefs of the nearest provinces being subjected to a certain amount of interference from the central government, while those of the districts furthest away or most difficult of access were almost independent. The Lao, Kambodian and Malay, as also several of the more distant Siamese provinces, were in fact regarded, either in groups or singly, as dependencies rather than as integral parts of the kingdom, though their chiefs were of the same official status as those of the more important provinces nearer the capital. With the consolidation of power and extension of administration which began with the present dynasty, the powers of the *Chao Muang* were gradually restricted, but in many cases the influence of those officials and that of their families was so strong within the limits of their *Muang* as to render early efforts at provincial administration of small practical value. Thus the central government continued without much real control over the rural districts until the general development of trade, and the consequent opening up of the country, which marked the last quarter of the nineteenth century, revealed throughout the greater part of the interior a disorderly, not to say chaotic,

state of affairs, not only inconsistent with oft-expressed intentions of good government, but constituting an actual national danger, urgently demanding immediate attention. The necessity for developing the general revenues of the kingdom to keep pace with the increasing demands of an expanding administration, was also becoming acute at this time and furnished another pressing reason for reform in the rural districts. Thus, when the Ministry for the Interior was constituted, in 1892, it became at once the centre of a considerable activity. The new department, which assumed many of the duties and traditional powers, as well as the titles, of the old Civil Division on the Left, was naturally one of the most important branches of the Government, a condition which was further emphasised by the appointment of H.R.H. Prince Damrong as its head. This prince, than whom the Crown had, during the whole of his long service, no more active supporter in all schemes for the advancement of the country and for the emancipation of its people, had already made a study of the question of provincial reform, and in 1889-90 had visited Burma and other neighbouring countries, the local conditions of which were somewhat similar to those of Siam, and had investigated the systems of administration in force there. The first-fruits of these studies and investigations appeared in 1894, when the old *Muang* or provinces were grouped together to form a number of administrative Circles to which the name of *Monton* was applied, and in the appointment of a Resident High Commissioner to the charge of each, with authority over the *Chao Muang* and acting under the orders of the Minister. From that moment the reorganisation and regulation of the wide powers of the *Chao Muang* began in earnest. The province was split up into a group of districts or *Ampö*, each under a district officer or *Nai Ampö* and, by an excellent law which was passed in 1896, the whole system was consolidated and completed by the intro-

duction of village government modelled to some extent upon that in force in Burma. The title of *Chao Muang* was altered to *Pu Wa Rachakan Muang* and later to *Pu Wa Rachakan Changwad* which may be translated "Governor," and the semi-hereditary nature of the office was abolished, except in the Northern Lao, the Kambodian and the Malay provinces, where the hereditary office and the title of *Chao* was allowed to continue. The way of this far-reaching reform was, however, neither easy nor rapid. To find men competent to fill the new positions was at first a matter of extreme difficulty. The selection of High Commissioners was not always fortunate, and several changes were necessary during the first years. In the appointment of governors and district officers the importance of local influence was fully recognised, and wherever possible the *Chao Muang* were retained in the first office while the officials who had occupied the position of *Kromakan* (a sort of Justice of the Peace), under them, were usually selected for the second; but many of these country gentlemen were unwilling to surrender their former privileges and freedom from restraint, while others were quite incapable of performing the duties now demanded of them, and these were consequently compelled to retire into private life in favour of more amenable and more able men. To meet the shortage of officers became for the time the chief object and anxiety of the Minister. Young men of good parentage and, when possible, the sons of the old governing families of the provinces who constituted in effect the real aristocracy of the country, were persuaded to enter into training for the service of the Interior, and youths of no particular family but who had done well in the schools were eagerly snapped up for the same purpose.

The office of the Ministry for the Interior became a forcing house for the production of officials, and racial distinctions were not allowed to stand in the way of

any who entered it. Siamese, Chinese, Kambodians, Môn, Malays, all were alike passed through the mill, the best of the out-turn being drafted off to man the various departments of the Ministry. A serious difficulty was caused by the reluctance of the young men to consign themselves to permanent residence in the country districts. As almost the whole of the upper and middle classes resided in the capital, all the amenities of life were naturally concentrated there, and even the best provincial towns were singularly lacking in such pleasures and distractions as appealed to the Siamese temperament and habits. Moreover there existed an idea, firmly rooted in the customs of the past, that absence from Bangkok and the immediate precincts of the Court meant sure neglect and official oblivion, and that for a man of ambition to immure himself in the jungle was mere foolishness. Thus, even when the men had been found, it was not always easy to persuade them to take up the appointments which offered, or to prevail upon them to stay for any length of time at their distant posts, and it was not until the inducements offered by good pay and prospects of ultimate promotion had been made very clear, nor until good houses had been provided at out-stations, that this reluctance was to some extent overcome. At present the Civil Service of the Interior is usually recruited from the Civil Service College, whence the young men who pass out proceed to appointments as District officers, from which position they may rise in the ordinary course of events to be Governors. Patronage, however, is by no means a thing of the past and appointments are still occasionally made for reasons other than approved merit, some of which are anything but advantageous to the public service.

In the progress towards efficiency which began with the establishment of the Cabinet of Ministers, Prince Damrong's ability and energy enabled him easily to outstrip all competitors, so that the Ministry

of the Interior soon developed out of proportion to the other great Departments. And since the desire of the king for progress would not allow of delay, much work which should have been done by others devolved upon this hive of industry and enthusiasm. Indeed at one time the Bureau of the Interior so completely overshadowed most of the other Ministries that it appeared either to have swallowed them entirely or to be about to do so. Thus the Departments of Revenue, Police, Criminal Investigation, Forests and Mines were all definitely attached to this Ministry, while the Public Works, Land Registration and Agricultural Departments found themselves unable to function unless the Ministers who controlled them received the constant support, assistance, and sometimes the goadings, of Prince Damrong, and even the Foreign Affairs of the State felt, and were for awhile moulded by, the influence of this statesman.

A matter of scarcely less importance than the organisation of the general administration was the provision of an adequate Police Force. With the time-honoured custom of collusion between officials and professional criminals strong in the land, from which indeed many of the old chiefs derived considerable profit, it was scarcely to be expected that any genuine effort really to suppress crime, would be made by the country justices of the old school, even at the urgent command of the king. But though permitting and encouraging law-breaking amongst those who belonged to their own family or who had made it worth their while, they were ruthless in the suppression of criminals who had neglected to purchase immunity, and by thus creating a monopoly of this form of industry, the chiefs no doubt exercised a sort of check and restricted evil-doing to some extent, for it was very noticeable that with the reorganisation of rural officialdom, and the removal of the chiefs or the curtailment of their powers and authority, violent

crime of every description increased to an alarming extent and very soon passed altogether beyond the control of the authorities. To meet this difficulty the Minister for the Interior devised a scheme for the maintenance of a force of gendarmerie in each division which, while leaving the investigation of crime and prosecution of criminals in the hands of the Civil Officials, would provide the latter with a weapon by which their orders could be enforced and their authority made manifest in all parts of their jurisdiction.

With a Danish military officer's assistance the nucleus of such a body was organised, the Minister, with the caution which marked all his reforms, restricting its action during the experimental stage to one Circle only, where it could be carefully watched and subjected to such alterations as circumstances might require. The ability and extraordinary energy and personal activity of the Danish Inspector-General from the first secured the success of the innovation, and, after a period of trial, the sphere of action of the force was gradually extended until it included the whole of the country controlled by the Ministry for the Interior.

The gendarmerie force ultimately grew to a contingent 8,000 strong, with officers drawn partly from the army and partly trained in the force, with a school for non-commissioned officers at Nakon Pathom a few miles out of Bangkok, and with a backing of half a dozen Danish officers, the whole well armed and disciplined and adequately housed in barracks and outstations all over the country. In Northern Siam, where a large proportion of the force is stationed, it was severely tested during the trouble with the Shans in 1902 when, though still very young, it acquitted itself satisfactorily. In 1909, when co-operating with the French authorities on the Eastern Frontier, it successfully "wiped the eye" of the French *Tirailleurs Annamites*, a handful of men under the personal leader-

ship of the Inspector-General capturing a gang of noted border cut-throats who had eluded and harassed a strong French force for many months.

The reorganisation of the revenues of the Interior presented many difficult problems, of which not the least was the question as to whether the Ministry for the Interior or that of Finance should inaugurate and control the said reorganisation. Prior to 1892 the revenues had been partly under the control of the old Ministry of Agriculture, which managed them exceedingly badly, and partly under the Finance Department which contented itself with leasing them whenever possible to speculative Chinamen and other capitalists, a course which combined much hardship to the people with no small loss to the Treasury and was clearly incompatible with sound administration. When the necessity for fiscal reform in the interior became most pressing, the Ministry of Agriculture was incapable of making the required effort at improvement, while the Ministry of Finance was in possession neither of the requisite knowledge of local conditions nor of the means to acquire that knowledge, and hence, after much discussion and some heartburnings, His Majesty confided this very important undertaking to the Minister of the Interior. Prince Damrong at once gave his attention to the matter, and, after a considerable time spent in making inquiries and gathering information from his rural officers, started an experimental Revenue Office in one of the Circles, to work under the orders of the High Commissioner. Numerous experiments were tried here with the advice and under the superintendence of an English officer whose services had been lent by the Government of India to Siam. The upshot was that, after sufficient experience had been gained, a Revenue Department was organised, subordinate to the Ministry of the Interior, with its headquarters in Bangkok and with branch offices in every Circle, Province and District within the juris-

diction of the Ministry, the whole under the general direction of the aforesaid English officer and with the intimate co-operation of High Commissioners, Governors and District Officers. This Department proved a success. One by one problems of fiscal reform were taken up and solved; the land, fisheries, capitation and other taxes were regulated by new laws, and the revenues accruing from the rural districts were gradually and considerably increased, while the actual incidence of taxation upon the people was not noticeably heavier than formerly, the improvement being largely due to a better adjustment of the taxes and to a complete revolution in the manner of collection.

The Royal Forest Department and the Department of Mines and Geology, though always in theory forming parts of the Ministry of Lands and Agriculture, were for many years attached to the Ministry for the Interior. Their organisation and the work which they are accomplishing in the country are described elsewhere in this book, and all that is necessary to say here is that, from the first, both Departments received the earnest care of Prince Damrong, who, with the advice of English experts of approved ability and experience, built them up into efficient and profitable sections of the Government Service. They contained in their ranks a number of young Siamese, trained in the best available Forest and Mines schools, of whom several, after years spent in the accumulation of experience in practical work, have risen to high positions in the Departments.

In course of time, as the other Ministries tardily developed and began to show signs of being able to manage their own concerns, it was to be seen that the Ministry for the Interior had overgrown itself, and that unless the system of government introduced in 1892 was to be changed, something in the semblance of a pruning operation had become necessary. In 1915,

Prince Damrong retired after over twenty years of service as a Minister of State, whereupon the knife was applied and the Ministry was stripped of much of its power and prestige. The office of High Commissioner, hitherto counted the highest grade in the cadre of Provincial administration, and the holders simply officials of the Ministry for the Interior, was abolished and in its stead appeared, that of Lord Lieutenant, the occupants appointed by the Crown direct from amongst the more favoured, or more reliable, of the King's servants generally, and deriving inspiration for the exercise of their functions from all Ministers equally. The Departments of Gendarmerie and Jail Superintendence were transferred to the Ministry of Local Government and Police, and the Criminal Investigation Department to the Ministry of Justice; the Revenue Department went, after all, to the Ministry of Finance, and Public Works in the Interior passed to the Ministry of Ways and Communications. The important part assumed by the Ministry for the Interior in the organisation of Land Registration and the business of agricultural development was suppressed, and the Ministry of Lands and Agriculture was left to make what it might of these, that same Ministry having previously received custody of the Department of Mines, as it subsequently did of the Forest Department also. Thus the Ministry for the Interior became, for a time, little more than the repository of the rolls of the rural districts staff, and a sort of parochial centre and Department of Health, but it recovered much of its former importance when, in 1922, the Ministry of the Capital was merged with it, whereby it regained some of its lost departments and many others besides.

The authority of the Minister for the Capital, or of "Local Government," as the Department was rather quaintly styled in English, ran throughout the city of Bangkok and its suburbs, extending to the sea on the south and in other directions to the borders of

the surrounding Circles of the Interior. Subordinate to this Ministry were Police, Sanitary, Harbours, Works and other Urban Services, with a general administrative staff somewhat after the pattern of a Circle of the Interior. The same Ministry also controlled the Provincial Gendarmerie in all parts of the country and was responsible for the Prisons Department. The constitution of the Capital and its environs as a separate Ministry, though at one time good policy, was found as administration developed to have many drawbacks, notably a duplication of Departments and consequent waste of money. Consequently the Royal Decree uniting the Ministries of Local Government and Interior was received with general satisfaction in Government Circles.

Police. The Police Force of Bangkok was instituted in A.D. 1862 in the form of a body of fifty-five officers and constables, mostly Malays and Indians, placed under the command of an Englishman and located in barracks close to the old fort near the mouth of the Klong Kut Mai. Passing through many vicissitudes, the Force grew in size if not in efficiency and, by 1892, had become a body of 1,500 men, quartered in stations in different parts of the town and suburbs, and consisting chiefly of men of Siamese race, with a Siamese commissioner and other officers. The Force was very inefficient at that time. Many of the constables were the slaves of the higher officers and were entirely without training even of the most rudimentary description. The sense of extreme respect, not to say servility, which every Siamese evinces towards those whom he recognises as his "betters," made these constables chary of interfering with the doings, however nefarious, of persons of good family or connections or having interest in high places, while the feelings of contempt which they shared with their countrymen towards all foreigners, led to frequent abuse of their authority where Europeans or Asiatic *protégés* of the

Treaty Powers were concerned ; abuse which gave rise to a distinct reluctance on the part of the Foreign Representatives to recognise the Police Department as a responsible institution.

It was, however, its overbearing attitude towards foreigners which proved the ultimate making of the Force. His Excellency the German Minister to Siam, in the year 1896, was in the habit of driving a dogcart furiously through the crowded streets, scattering the traffic in all directions and frequently damaging the property of other people and his own carriage also. At length his almost daily collision occurred near a police station, whence, at the noise of the consequent altercation, there issued a few curious constables. A heated and wildly-gesticulating European meeting their sight, he was at once arrested and dragged within the station, where, in spite of emphatic assertion of his identity in broken English, he was detained (an attempt to break away being checked by the tap of a truncheon on his bald, perspiring crown) until a passing European acquaintance explained the situation in the vernacular, and obtained his release. The upshot of this *contretemps* was the engagement of an experienced English police officer from Burma to command the force, followed by a reorganisation which in time became complete in every sense. The erstwhile rabble of slaves was changed into an organised body of some 3,500 good men, engaged on the voluntary principle, well clothed, civil spoken, moderately well drilled, and of a passable average intelligence. The officers were selected by examination after a period of study in a special cadet school, very popular with the youth of the official class. Before long the work of the Department could bear comparison with that of the police of other large cities of the East, and the whole institution became a credit to those concerned with its organisation and subsequent administration.

In 1909, out of deference to the feelings of certain

military enthusiasts, voluntary enlistment for the Police was given up and the force was placed, for recruiting, under conditions similar to those of the Army and Navy. The change was not a good one, for as the old volunteers were gradually replaced by conscripts a loss of general efficiency became noticeable. There were many who realised that the Siamese conscript, though apparently good material for a soldier, was not quite the sort of thing from which a satisfactory policeman could be made, and a party grew up that aimed at the restoration of the voluntary system for the police forces. The matter was under discussion for years, during which the police force certainly did not improve and, in 1923, the conscriptionists were apparently as far as ever from admitting that, even though the personnel of the military services may suffer to some slight extent, the interests of the State imperatively demand a proper selection of the best men for the Police, and the provision of attractions in the way of pay and pension and accommodation, calculated to make the life of a constable something better than the hungry existence of the conscript. Conscription had the same effect upon the rural Gendarmerie as upon the City Police, a deterioration of this fine force having set in with the change, some of the results of which appear in an increase of crime of all kinds during the decade 1912-1922, which at one time reduced the rural administration to a condition bordering on chaos.

* **The Sanitary Department** came into existence in 1897. Like the Police and most other State Departments, it has had its vicissitudes, and at first was not of much account. It is now an efficient institution charged with the cleansing and repairing of roadways, the disposal of refuse from houses, the control of markets and of food-supplies, the administration of waterworks, the construction and maintenance of State buildings, the carrying out of quarantine and

other regulations against the spread of disease, and the general management of the hospitals of the city. The Director-General of the Department, which does not function outside Bangkok, is assisted by a number of foreign experts of various nationality, many of them individuals of the highest scientific and technical attainments.

The question of a water supply for the capital was for many years under consideration, being one very nearly concerning the welfare of the city, for, though river water is plentiful at Bangkok, it is always of a bad quality and during the dry season, which sometimes lasts for six months of the year, is so impure as to cause, when used for drinking and household purposes, a heavy death-roll from cholera, dysentery and other diseases. Many schemes were proposed from time to time, but the systems advocated were found either unsuitable or too expensive, and the matter was constantly postponed. About the year 1903 boring for artesian wells was tried, and as water was obtained at depths varying from 400 to 600 feet; it was thought that here might be a solution of the difficulty. It was found, however, that the cost of boring wells sufficient to supply the whole city would be very great, and the quality of the water proved on analysis to be variable and, at the best, not good enough to warrant the expenditure. A certain number of wells were sunk, but the question of a general water supply still remained unanswered. Inquiries into various schemes which had been carried out elsewhere were therefore resumed, and, after considerable further discussion, it was determined to adopt the system which had been successfully applied at Alexandria and elsewhere. The plans were drawn and estimates were framed. It was found that sufficiently good fresh water could be obtained from the Menam Chao Phaya River, some twenty miles north of the city, and that an open canal could be

constructed from there to a point just north of the town, whence the water, after being filtered and ozonised, could be distributed over the greater part of the city, the whole at a cost of about three million ticals, or, at current exchange rates, £230,000. This scheme and the funds for its execution, were sanctioned by Royal Decree in the year 1909 and the work was at once put in hand. The system was completed and formally opened in 1912. It has proved a complete success and has been the direct cause of a remarkable improvement in the health of the population of the capital. The supply of water is ample and is of an excellent quality, which is maintained by careful and thoroughly efficient (foreign) control of the works, and by continual analysis at the Government Laboratory attached to the Ministry of Commerce.

The Office of Health which is under the immediate direction of this Department, though forming part, for purposes of general administration, of the Public Health Department of the Ministry for the Interior, is well organised and equipped. There are five main hospitals containing upwards of a thousand beds and affording outdoor relief, perhaps not yet fully adequate to the requirements of the population, but, if the present rate of extension and improvement continue, likely to become so very soon. The finest of these institutions is the Chulalongkorn Hospital built in memory of King Rama V, and replete with every modern requirement and convenience. It is actually a military foundation but supplies treatment for the general public, and enjoys considerable support by private contribution in addition to the State funds provided for its maintenance and extension. The Police Hospital, situated in the heart of the city and dealing chiefly with cases resulting from crime, street accidents and so forth, reflects credit on those responsible for its present state of efficiency.

The Pasteur Institute of Bangkok was founded

about the year 1912 and was at first supported by private subscription. Later on it was taken over by the State, and under the able and highly-gifted French Doctor who directs it, has become a well-organised and very valuable institution.

The Lunatic Asylum of Bangkok, which used to be a disgrace to the administration, was placed some years ago under the supervision of an ardent and intelligent English Doctor. It is now one of the best regulated medical establishments of the country. Its unfortunate inmates are no longer classed all together and treated as condemned criminals, but live in comfort, subject to a proper regimen of health which gives to the curable cases a chance of recovery and to the others such alleviation of their wretched situation as is possible.

The Bangkok Revenue Department, established in 1898, has grown out of a small office organised in that year for the collection, by direct Government agency, of various taxes which had hitherto been farmed. It now forms a branch of the General Revenue Department under the Ministry of Finance, is responsible for the collection of some ten millions of ticals annually, and has played a not inconsiderable part in the reorganisation of the tax collecting machinery of the State, to the advantage both of the tax-payer and of the Government.

The Harbourmaster's Department is the modern substitute for the ancient office of *Chao Tah*, or "Lord of the Landing Place," the holder of which was mis-called by early travellers by the Malay title of "Shah Bandar." Before the advent of the treaties the holder of this office exercised much power over foreign traders, but with the introduction of extra-territorial rights the position was shorn of most of its privilege and prestige, and gradually sank into insignificance. In the absence of laws and regulations for the control of the Port, the enacting of which had been several times

attempted, only to be frustrated by the opposition of the foreign Consuls, the Department had practically no duties to perform beyond the maintenance of lights at the river mouth and on the bar, which it performed very badly with the assistance of a small steamboat, the *Gladys*, once the well-appointed pleasure yacht of a former Lord Lonsdale. In the year 1905, however, a Harbour Regulation was at length assented to by the Consuls and was made law, whereupon the Department was galvanised into action and undertook the control of the shipping in the Port, the regulation of berths, maintenance of fairways and the registration of all Siamese craft both sea and river-going, which duties it now performs with fair efficiency. For some years the Department was responsible for the lighting of the coasts of the Gulf of Siam, a duty which it carried out with such indifferent success that owners and skippers of vessels frequenting those parts had reason for thankfulness when, in 1920, this responsible work was taken over by the Royal Navy.

Amongst the multifarious duties of the Governor, or Lord Prefect of the Capital, who now holds office under the Minister for the Interior, are the administrations of the street traffic laws and regulations which, after years of chaotic confusion, are now arriving at some degree of orderliness. Also the general supervision of the electric tramways and lighting of the city, which are in the hands of a powerful private Company with the exception of the lighting of the northern part of the town for which the Government has its own plant.

THE MINISTRY OF FINANCE.

The high official of Siam who managed the finances and kept the money of the State, was always one of the greatest dignitaries in the land, more especially in the old days when the State purse was the king's

purse, and when, a large part of the revenues being in kind, the officer was to all intents and purposes the manager of a great monopoly of merchandise, a position which gave him the control of much of the internal affairs as well as of all the foreign trade of the country. For the last reason the Finance Minister was well known to the European merchants trading with the country in the seventeenth and eighteenth centuries, as the highest personage with whom they came in contact. The office carried with it a long and imposing title, abbreviated for ordinary use into Phra Klang, which Europeans, after the careless manner of the times, corrupted into "Barkalong." With the gradual relinquishing of trade by the sovereign and the increase of farmed monopolies, the grip of the chief financial authority upon the country was somewhat relaxed, and in course of time the officer became little more than a Chief Controller of the royal funds. Later again, as the offices of a partially organised government came into existence, the power to collect certain moneys, sufficient for their maintenance, was usually vested in the chiefs of such offices and, the country being at that time entirely innocent of the complications of international money affairs, and remaining consequently in the enjoyment of profound financial peace, the necessity for centralised administration of the national wealth remained unrealised and continued to be so down to the latter part of the nineteenth century.

When, however, the *Senabodi* or Cabinet of Ministers was decreed in 1892 the old unsophisticated system came to an end and the office of Phra Klang, blossoming forth into a Ministry of Finance, very soon began to gather to itself the revenues derived from every service and to assume control over the expenditure of the different Departments. An Accounts' Department was instituted and a budget of estimated revenue and expenditure became an annual compilation. The

•
submission of the budget for the royal sanction was, however, extremely unpunctual and no man could say at what moment of the financial year it might appear, wherefore, as the Treasury would disburse no funds not duly and properly sanctioned, the Heads of Departments took to utilising revenues which should have been paid in to the Treasury in order to keep their administration from coming altogether to a standstill, and, when at last the budget was passed, drew out in a lump sum the whole amount allotted for the year, lodging the same in one of the local banks, whence it could be obtained without trouble as required. Thus, in spite of the Ministry of Finance, each Department had a private banking account, disposing of its funds in such manner as seemed to it most suitable, and going its way, untrammelled by anything in the shape of audit. The peculiarities of this system were revealed when, shortly after the appointment of an English Financial Adviser, in 1896, the Heads of Departments were prevailed upon to conduct their financial operations through a Comptroller-General's Department under the Ministry of Finance, for when the various banking accounts were closed and the balances refunded to Government, these latter were found to be, in many cases, very large and to contain allotments for office establishments, buildings and supplies of all kinds, budgeted for in years gone by and drawn from the State Treasury but never expended.

During the first few years of the Ministry of Finance, though much money was undoubtedly lost owing to lack of control over the sanctioned expenditure, the disbursements were kept well within the national income by the simple expedient of refusing sanction for anything in the shape of new and unaccustomed outlay. The demands of an expanding administration, however, soon became too insistent to be withstood, and the attention of the financial authorities necessarily became directed towards increasing the revenue as

well as merely checking expenditure. The reorganisation of the numerous sources of income which were under the control of the Ministry of Finance was therefore taken seriously in hand, and to such good purpose that the annual total, including the receipts from the Ministry for the Interior, increased, between the years 1896 and 1903, by a hundred per cent., and this not so much by enhanced taxation as by improved administration and by the adoption of measures to secure the payment into the Treasury of all moneys collected. During the same time, however, the national expenditure rose by leaps and bounds, and before the end of that period had more than overtaken the revenue receipts, so that the annually recurring surplus of the years before the era of progress was converted into a frequent deficit. From 1903 to 1914 the revenue continued to increase with fair regularity, the expenditure keeping pace with it in spite of small foreign loans which were taken from time to time for the building of railways and other remunerative public works. Then came the years of the Great War when, expenditure on development being necessarily checked and trade being brisk and prices of every kind of produce very high, a series of surplus years began which continued up to 1919 and enabled the State to accumulate a considerable national reserve. But the period immediately succeeding the end of the war brought a crop of financial difficulties to Siam and, between the phenomenal rise in the value of silver and in the cost of living during 1919, a partial failure of the rice crop in 1920, and the sudden and complete relapse of silver in 1921, much of the said reserve disappeared as speedily as it had been amassed.

Some years ago the Government began to be somewhat disturbed by the fact that nearly half the State Revenues were being derived from the sale by auction of the opium, liquor and gambling monopolies. Extension of commerce had brought with it increasing

facilities for the smuggling of opium, and the financial equilibrium was frequently threatened by the failure of the opium farmers to pay their revenue, while even the densest intellects began to perceive the inconveniences of a system that encouraged drinking and gambling, sent large sums of money, the profits of the Chinese monopoly-holders, out of the country to China thereby draining the country of its wealth, and deliberately led the already sufficiently thriftless populace into waste and extravagance. An informal Anti-Gambling League came into existence, and, owing to the continuous representations of its leaders, the great gambling and lottery farms were at last abolished, leaving only a system of card-playing and betting licenses which brings in an income equal to about one-tenth part of that produced by the farms. Later on it was decided, not without some misgiving, to discontinue the liquor and opium farms also and to establish Government Departments to control, and gradually reduce, the traffic in these articles. In course of time this change was made, an Excise Bureau being organised under the Director General of Customs and a Royal Department of Opium being created, all under the general control of the Minister of Finance. It is possible that the avowed intention of the Government to reduce the consumption of liquor and opium may be in course of realisation but, if so, such reduction is certainly not shown by the fiscal results, for the revenue accruing to the State under these two heads rose steadily between 1903 and 1921 from about twelve, to over twenty-one, millions of ticals yearly, thus providing one-third of the gross annual revenue of the State and, after deducting the cost of administration and collection, a net profit of some four millions of ticals more than was obtained from the farms.

Appearances notwithstanding, the Government has by no means lost sight of the necessity for reducing the traffic in liquor and opium. It is awaiting the

revision of the foreign treaties, now accomplished with some of the Powers and under negotiation with others, to adjust its Customs and certain other duties in fair proportion to the wealth and commerce of the country, having done which the Minister of Finance will be able to dispense with the liquor and opium revenues without imperilling the financial safety of the country.

Banking. In the year 1888 the growth of Siamese trade led to the establishment of a regular branch of the Hongkong and Shanghai Banking Corporation at Bangkok. Up to that time the only banking facilities available were the agencies of the aforesaid Corporation and of one Indian and one Chinese bank, in the hands of European local trading firms. No paper currency existed except a few semi-private notes issued by King Rama IV, sealed with his own seal and now greatly valued as curiosities, and the only means of meeting the financial demands of trade were the import and export of Mexican and Spanish silver dollars and of Indian rupees. The Hongkong and Shanghai Banking Corporation soon acquired a good standing and, in 1893, a branch of the Chartered Bank of India, Australia and China was also established in Bangkok, to be followed in 1897 by a branch of the French Banque de l'Indo-Chine. All three banks are now doing a large business in financing foreign trade, in private loans and deposit accounts, and in the money affairs of the Government, which maintains a floating balance with each of them. There is no doubt that the foreign banks have done a great deal to assist the growth of commerce since they were established, but as receptacles for the earnings of the people of the country itself they have achieved next to nothing, and, in fact, they decline to receive money on deposit from any person who is unacquainted with some European language.

In the year 1904 a local bank was inaugurated under

the auspices of the then Minister of Finance, and this, after sundry rather unsavoury vicissitudes, became established as the Siam Commercial Bank, a limited Liability Company under Royal Charter and pledged to the assistance of various financial projects of the Government. The apparent prosperity achieved by this institution created a local boom in banking, and several Royal Charters were granted to similar undertakings promoted by enterprising Chinamen, out to attain affluence by the use of other people's money. The public, extremely suspicious of banks under European management, and hitherto holding aloof from the business, showed much confidence in these later institutions and flocked to deposit their savings therein; in fact the Siamese people seemed to have entered upon a new and prosperous phase of commercial development. The promoters, whose main conception of banking operations was afterwards found to be the distribution of their depositors' money in the form of large unsecured overdrafts to each other, flourished exceedingly until one by one the said overdrafts were found to be irrecoverable, when shadows of anxiety fell across the new prosperity. After sundry, convulsive struggles to carry on, the managers, promoters and others connected with the banks, began to find it desirable to visit their relations in China, which they did, leaving the public to discover later that its new-born confidence had been misplaced.

The Government stood aside in apathy, while the above games were in progress, though by the terms of the Charters given to the banks it was solemnly bound to take such precautions as might from time to time be necessary to safeguard the public interests. Indeed the first failures, which concerned only the money of small private people, may be said to have caused more amusement than alarm in official circles. But there came at length a loud and reverberating crash which startled the whole country into the realisation that

it had been living in a fool's paradise while certain astute persons were pillaging its people, straining its credit generally and setting back the commercial clock. The catastrophe in question was the suspension of payment by an institution known as the Chino-Siam Bank, a concern under Chinese management and ostensibly concerned in financing the rice trade with Hongkong, though, according to rumours that got about after the smash, actually engaged in providing funds for the notorious Sun Yat Seng and the revolution in China. All the local banks were more or less affected by the failure, the Siam Commercial Bank so seriously that nothing but reconstruction with the assistance of new capital supplied by the State saved it from total ruin. This sad experience effectively cured the public of its partiality for Siamo-Chinese banks, and put an end to that particular form of gambling, though the foreign banks have continued to prosper and have been increased by the opening of branches of the Japanese Bank of Taiwan, the Bank of Canton and the Mercantile Bank of India.

The influence of the banks is scarcely felt beyond the capital except in the peninsular tin mining districts, where branches of the Siam Commercial and Chartered banks have been opened. For the assistance of traders in the interior the State Treasury in Bangkok is by way of selling drafts on the treasuries of the provincial towns. But merchants have not hitherto made much use of the system, preferring to carry money about the country and to accept the consequent risk of loss, rather than take the safer but perhaps somewhat tedious course.

Currency. In many of the remoter districts of Further India, and on the borders of South-West China, lumps of silver, the shape and weight of which vary in different localities, are still in use as money, though the British Indian rupee and, to a less extent, the French piastre, are replacing them by degrees.

Some of these uncouth coins are simply casts of the small iron pans in which the metal has been melted, others are small bars bent and twisted into a more or less uniform shape, and others again are small pieces of uniform weight cut off from a thin cylindrical bar of silver. About a century ago the money of Siam consisted of rounded lumps of gold or silver, roughly resembling small sections of cylindrical bars, bent by hammering until the ends approach each other, and stamped on the convex surface with a Siamese crown or a "Chakr" or other royal emblem. These coins were usually made of four sizes in silver, the commonest about equal to a rupee in weight and the others a half, a quarter, and an eighth of the same. The first was called *baht*, known to Europeans as a "Tical" the second *song saleung*, the third *saleung*, and the fourth *juang*. A piece called *tämleung* equal to four *baht* was also made but only in small numbers. Coins of similar shape, but of gold, represented higher values, one being equal to twenty, another to ten, and another to five *baht*.

Early in the nineteenth century flat silver coins were made in Bangkok, but these were more in the nature of an experiment than of a genuine currency, and, though now of interest as curiosities, were never seriously put into circulation. In 1861, however, a small mint for coining flat money was set up in the Palace, and in the following year flat coins corresponding to all the above-mentioned values were issued, bearing on one face a Royal Siamese crown and on the other the effigy of an elephant surrounded by the "Chakr" or sacred wheel. An issue of flat gold coins was attempted but was very restricted and, as it was found that the coins soon disappeared from circulation, being melted down or worn as jewellery, the issue was stopped altogether and the silver *baht*, or tical, became the most general form of currency. Moreover, it was difficult to procure gold for minting

purposes, while silver could always be obtained by the simple process of melting down silver dollars imported from Singapore, three of which made five ticals. And thus Siam naturally fell into line with the other States of the East and Far East as a country with a silver-standard currency. Large sums of money were, and still are, considered in so many *chang*, an amount not represented by any single coin but consisting of eighty ticals. Old gold coins, both round and flat, are now much in request for making cuff-links, watch-pendants and other jewellery, and it is probable that a good many are manufactured by enterprising jewellers to meet this demand. Formerly the only currency of lower value than the silver *fuang*, or one-eighth of a tical, was represented by cowrie shells, or *bia*, of which several hundred were required to equal one tical, but about the date when flat silver money was first made, a copper coinage was introduced consisting of the *song phai*, the *phai*, the *att* and the *solot* or *lot*, equal respectively to half, a quarter, an eighth and a sixteenth of a *fuang*. Of these the *phai* and *att* came into common use, but not very many of the other two were put into circulation.

From time to time new machinery and dies were introduced and gradually the coinage improved. In the last reign the effigy of the king first appeared on both silver and copper coins, the reverse side of the former being filled with the Siamese Royal arms and of the latter with a full length figure of a Thévada, or angel, seated in an attitude similar to that of the Britannia on an English penny, but, with the trident, shield and other details of the latter represented by Siamese equivalents.

Long ago it was realised that the division of the tical into sixty-four parts, though identical with the system of coinage division in use in British India, is but a clumsy arrangement, and more than once the Government proposed to introduce a subsidiary

coinage based on the decimal system. About 1898 copper coin equal to one-hundredth part of a tical was made in large quantities to the order of the then Minister of Finance, but circumstances prevented its being brought into use, and for many years it lay forgotten in the Treasury vaults. The Gold Standard Law of 1908, however, legalised this coin, called *satang*, the Pali for "a hundredth part," and also nickel coins of five and ten *satang* value, all of which were put into circulation in that year. The old copper coinage was not simultaneously withdrawn or demonetised and a certain amount of confusion prevailed while the two systems remained in force together, but matters righted themselves in time; the *att* and *fuang* disappearing gradually and leaving the decimal subsidiary coinage firmly established. The *satang* coins of all three denominations are of a uniform design, consisting of a "Chakr" or sacred wheel on one face and the words "Siam Raj" with the value of the coin on the other. The coins are pierced through the centre, which permits of their being threaded on a cord for convenience of carriage and of counting.

In the year 1902 a new royal mint was built and equipped at considerable expense, but owing to defective management the issues of coin from it were for a long time not so good as those from the old establishment. A gradual improvement has, however, at length been effected and the silver money now turned out is as good as the average elsewhere. The nickel and copper subsidiary currency was not usually minted locally, and during the war, supplies from abroad being cut off, much trouble was caused by the lack of it. Nickel money practically disappeared from circulation while copper rose in value until at one time only sixty-five *satangs* could commonly be obtained for one tical. In 1919 the situation was relieved by purchases from Europe and by the minting of several millions of copper *satangs* in the local mint, but, so late as 1921, the

subsidiary coin in circulation was still below requirements.

Exchange. When, some five and thirty years ago, the value of silver began to deteriorate, the currency of Siam depreciated in harmony with that of other silver-standard countries. As the deterioration continued and there appeared less and less likelihood of any considerable future recovery, the Government found it necessary to follow in the footsteps of India and Japan and to take measures to counteract the depreciation. Accordingly in 1902 the free coinage of silver was stopped, and the sale of ticals for gold was arranged for by law at prices which were gradually enhanced, until the value of the tical was raised from elevenpence halfpenny, the natural value of the silver contained in it in 1902, to one shilling and sixpence and one eighth, at which artificial value it was maintained stationary for many years, though the Government never guaranteed that it might not be pushed up even higher. In support of this exchange policy the Government set aside a reserve fund of nearly a million sterling and with this it purchased from the foreign banks in the years 1907, 1908 and 1909, over eleven million ticals which were withdrawn from circulation. In 1909 and 1910 the banks bought back the greater part of this silver at the Government rate leaving the sterling fund practically intact, and available for future operations. Results of this exchange policy were the improved credit of Siam abroad, and the saving of large sums in the purchase by the Government of machinery, arms and other supplies in Europe. The Gold Standard Law of 1908 which confirmed and reiterated the policy, provided also for the establishment of a gold currency and the issue of a gold coin called a *Tot*, a Siamese rendering of the Pali word *Das* (in English 'ten,') equal in value to ten ticals, but the coin, though minted in small quantity as a sort of curio, has never been issued.

The astonishing effect on silver of the commotions caused by the Great War compelled the Government to advance the exchange value of its money again. During the years 1917-1918 the value of silver bounded up to three times what it had been in 1914 and the intrinsic value of the Siamese tical rose to about three shillings, as against the authorised exchange value of one shilling and sixpence. The export of silver was of course forbidden, but the order proved ineffective and so many ticals were clandestinely removed out of the country that the number in circulation, nominally about ninety millions, was soon commonly reported to be not more than forty. To save what remained of the ticals the exchange value was raised through successive stages until, in the beginning of 1920, it reached two shillings and one penny and a fraction. The step did not, however, save much of the silver and it had the disadvantage of hampering export trade, already enfeebled by failure of the 1919-1920 local rice crops and by high maritime freights. Moreover, the change was objected to by the foreign banks, which acquiesced in it only after receiving guarantees against loss in case of a relapse. Then, early in 1921, the value of silver fell again and a very difficult situation was created. In financing imports which continued at a high level in spite of the falling away of the export trade, the banks had reached the limit of the government guarantee and declined to make further remittances without extension of the guarantee. The Government, already involved heavily by the first guarantee, was disinclined to extend, but looked to the export trade to reverse exchange operations and so relieve the banks and itself. But the export trade could not expand because of the absence of articles of export and of the fall in the value of silver or, in other words, because the rate of exchange in Siam was too high relatively to the outside world. Thus an *impasse* seemed to have been reached, and things

for a time looked bad, but the situation was relieved by the abundance of the 1920-1921 rice crop which, the evil prophecies of pessimists notwithstanding, found a ready market abroad at prices that proved remunerative and enabled the country to carry on without further alterations of exchange values.

Paper Currency. Many years ago the Hongkong and Shanghai Banking Corporation obtained permission from the Government to issue bank-notes, and, later, the Chartered Bank of India, Australia and China, and the Banque de l'Indo-Chine were accorded similar privilege. The notes, though never declared legal tender, were soon established in the confidence of the public of Bangkok, but outside the capital they were looked upon with some suspicion and were frequently not negotiable. In the year 1902 the privilege of the Banks was withdrawn and the notes were gradually recalled, being replaced by a Government paper-currency issued by the Treasury in accordance with Royal Decree. State currency notes of five, ten, twenty, one hundred and one thousand ticals value, were then put into circulation and speedily became very popular throughout the country. The law authorising the issues of this Government paper currency laid it down that a reserve equal to the total value of notes in circulation must be maintained by the Government, of which reserve three quarters must be ready cash, it being permissible to invest one quarter. But after the popularity and security of the notes had become established, the law was amended and the necessary cash reserve reduced, first to half the issue and later to a quarter. At the end of 1916 the value of notes in circulation was about 47 millions of ticals, a total which had been reached by gradual increase covering the fifteen years that had elapsed since the paper currency was started. But when the rise in silver value, alluded to above, had brought much of the current coin of the realm to the smugglers'

secret melting-pot, while, at the same time, the war had made the buying of silver impossible, more currency notes became necessary to replace the lost ticals. Therefore during the year 1917 the paper currency in circulation was increased by some twelve million ticals. During 1918 further increases were made by several big issues, one such consisting of some millions of one-tical notes, an innovation for which, fortunately, provision had previously been made in the Act. And with each new issue, the necessary cash reserve was reduced by amendment of the Act until, by the end of the year, the Government was no longer bound to hold any cash in reserve at all.

The opening of 1919 brought an intense demand for money, for the price of rice than rose to a quite unprecedented level and, to buy the Siam crop just coming on the market, the currency in circulation, coin and notes together, was quite insufficient. Metal being still unobtainable, more paper money had perforce to be produced, which was supplied to the banks for gold, and, the silver cash reserves in the Treasury being by this time practically exhausted, the whole of the notes in circulation were made temporarily inconvertible. By the middle of the year there were 143 millions of ticals worth of notes in circulation, against which the Government held certain extensive investments and a big supply of gold in London.

With the brightening of the financial outlook in 1921, the Ministry of Finance at once adopted the wise policy of reducing this great amount of paper money, and periodically withdrew large quantities of notes from circulation, so that by the end of the year the total issue in use had been reduced to seventy-two and a half millions of ticals worth. Those still in circulation, however, remained inconvertible.

Loans. When the desirability of railway construction first dawned upon Siam, the question of contract-

ing a foreign loan was also raised, and thereafter was periodically discussed at considerable length during several years. The question of funds was not, however, of immediate urgency, and railway making began and was continued until some twenty-five millions of ticals had been spent upon it out of ordinary revenue. Meanwhile the Government received much advice on the subject and, among other financial experts, the late Lord Cromer gave an opinion which was to the effect that the financial position of Siam appeared a very strong one and that, having no national debt and no very pressing reason to incur one, it would be well for the country to avoid borrowing. Other counsels prevailed in the long run, however, and in 1905 the sum of one million sterling was borrowed in London and Paris at $95\frac{1}{2}$ and carrying interest $4\frac{1}{2}$ per cent. per annum; by which means the considerable sums of money which had been annually paid out of revenue for railway construction became available for increases and improvements in the Army, Navy, Interior and other Departments of Government. Two years later, in the beginning of 1907, a further loan, this time of three millions sterling, was raised with much success in London, Paris and Berlin at 98 and bearing interest at $4\frac{1}{2}$ per cent. per annum, which money, after providing the sum required for the exchange reserve fund, was likewise largely devoted to railway construction. In 1909, an agreement was entered into with the Government of the British Federated Malay States for a sum of four millions sterling, increased later to four and three quarter millions, constituting the third foreign loan, to be advanced in instalments by the latter Government at par and bearing interest at 4 per cent., to enable Siam to build a railway through the whole length of Southern Siam to link up with the railways of British Malaya. Finally, in 1922, a further loan was taken, this time for two millions sterling, at 94 and bearing interest 7 per cent.,

for the purpose of financing railway, irrigation and other projects.

The interest and the amortisation funds in connection with these loans constitute an annual charge on the revenue of the State amounting to some five hundred thousand pounds sterling, which, being roughly 5 per cent. of the national income, cannot be regarded as placing much strain on the national finances. The loans raised in Europe are secured on the general resources of the State, and that raised in British Malayá is secured by a lien on the railway that has been built with the money.

The record of the Ministry of Finance during the last fifteen years is one of many trials encountered, many projects undertaken and many successes achieved. In the early days of administrative reforms, when enthusiasm for the new ways ran high and when the real meaning of financial control had perhaps not been fully understood, there were few who either wished or dared to obstruct the first hesitating steps of the new Ministry of Finance. At a later date, however, when the Ministry began to gather strength and became an obstacle to the extravagance and even to the legitimate, but too costly, aspirations of other Ministries, resentment was aroused, and resistance, either secret or open, was offered to the attitude of interference which the Ministry was bound to assume in order to do its duty. H.R.H. Prince Kityakorn of Chantaburi, son of King Rama V, was appointed Minister of Finance about 1906, and it is to his extraordinary perseverance and courage, ably supported by the very tactful and accomplished Englishman who was his adviser all through his Ministerial career, that opposition has gradually been overcome and the complete ascendancy of the Ministry in matters financial firmly and definitely established.

MINISTRY OF LANDS AND AGRICULTURE.

The Ministry charged with the administration of the Lands and of Agriculture in Siam has been through many vicissitudes. In the old Royal Council, constituted in the remote past and abolished in 1892 on the introduction of the present constitutional form of Government, the Sixth Councillor, who held the title of Boladep, sometimes with the rank of Chao Phaya and at others with that of Phaya, was in charge of all matters connected with agriculture, including the collection of the land revenues. This high office became the *Krasuang Krasetrakorn* or Ministry of Lands, Agriculture and Commerce, in 1892, the principal duties of which were the supervision of the collection of taxes on land and on produce, the issue and registration of title deeds to land, the making of land surveys and the administration of the new Department of Mines. The Ministry, however, was not a success. The collection of the various taxes was in some cases farmed out and in others made direct by Government agency, but both methods were badly organised in the beginning and worse administered afterwards, so that the State revenues from these sources steadily decreased and soon fell into hopeless confusion. At the same time the Survey and the Mines Departments failed to give satisfaction, while the attempts of the Ministry to organise the issue of title deeds and a system of land registration were quite futile. In 1897, therefore, the office was suppressed and its various Departments found a refuge with other Ministries, chiefly that of Finance. But two years' further experience showed that, bad as the Ministry may have been, this last arrangement was worse, and the King therefore resuscitated the Ministry and launched it upon a new career under the appellation *Krasuang Krasetratikarn* or Ministry of Lands, Agriculture and Commerce, with all the old Depart-

ments, and some new ones, in its charge. The Chief of the new Ministry, however, actually assumed control over the Departments of Lands and Surveys only, leaving all the others under the management of various of his colleagues until such time as the organisation of his Ministry might warrant his assuming full control without danger of catastrophe. The next few years were occupied in preparation, by cadastral survey and by the compilation of suitable Land Regulations, for the establishment of a system of Record of Rights in Land and of Registration, and, after numerous experiments, such a system was inaugurated, the first title deeds made in accordance therewith being issued in 1901. Since then practically the whole of Central Siam has been cadastrally surveyed, the owners of the greater part of the more valuable rice-producing lands of the country have been provided with title deeds, and the Department of Land Records has become one of the most valued institutions of the people.

Sericulture. In 1902 the attention of Siam was drawn to the fact that, while silk was grown by the people in many localities, none of any value was produced, so that those districts where silk weaving was an old-established industry had to import from Burma and from French Indo-China most of the raw material used. To end this improper state of things certain Japanese Sericultural experts were engaged by the Ministry of Lands and Agriculture, and an attempt was made to teach the people new and improved methods of silkworm rearing and silk producing. The foreign experts did their work truly and well, but a total absence of enthusiasm on the part of the people and the failure of the Government to maintain its interest in the matter, rendered their efforts abortive and brought about a collapse of the enterprise some five years after its inception.

Agriculture. But about that time, that is in 1907, it began to dawn upon the Ministry of Lands and Agri-

culture that the encouragement and development of the agriculture of the country might perhaps be considered one of its duties, and out of the remnants of the Sericultural Bureau the beginnings of an Agricultural Department were constructed, which Department, being placed in the charge of a youthful Prince just then returned from a course of agricultural study in Europe, began its existence with what seemed to be a fair prospect of success. A school of Agriculture was opened with European lecturers, and a highly-qualified young American expert was engaged to advise the Prince. But before anything had been accomplished the Prince died, whereupon the school went to pieces under bad administration and had to be closed, and the American expert, after two or three years of quite unsupported endeavour, returned disgusted to his own country. Through the years that followed, the Department lingered painfully, its establishment reduced to a mere nucleus and funds consistently denied to it. Changes of Ministers which occurred from time to time brought no improvement, and it was not until 1920 that signs began to appear of some sort of a realisation by the financial authorities that, Agriculture being the sole source of the National income, to neglect it and starve it while spending lavishly on Army, Navy, Railways and other "window-dressing" departments, must sooner or later bring disaster.

The Royal Survey Department was instituted in the year 1885 by an officer of the Survey of India who had been induced, while on duty in Siam in connection with Indian Surveys, to throw in his lot with the Siamese Government. At first attached to the army and recruited from amongst the floating Bangkok European population of sea-captains, unsuccessful planters, merchants' assistants and others, the staff was far from efficient and the work accomplished was not of a high order. Gradually, however, the personnel

was improved and the Department, transferred to the Ministry of Lands and Agriculture, did good work, carrying out in the space of some fourteen years topographical surveys extending over about 60,000 square miles and a cadastral survey covering half a million holdings of the more valuable arable lands. The rank and file of the Department were drawn from a survey school, itself forming a section of the Department which in the course of a decade or so turned out many hundreds of fairly competent young surveyors. The energies of the Department became more and more focussed upon cadastral work as the value of this became apparent, which did not please the military authorities who cared nothing for security of land tenure and facilities for land revenue assessment but called urgently for topographical maps. They continued to do this with such insistence that in 1910 the Government, unwilling to provide funds for both cadastral and topographical work, but unable to withstand army influences, suspended the former and handed the whole Department back to the army to use as it might think best. The Ministry of Lands and Agriculture, thus left with an extensive cadastral survey and Land Registration system on its hands, without a single surveyor for the maintenance of the same, drew attention to its curious situation and to the fact that under these circumstances the many millions of ticals that had been spent on cadastral work must shortly become mere wasted money. Thereupon a section of some forty men was hastily retransferred from the army, from which nucleus the Ministry of Lands and Agriculture in a few years rebuilt the Department of Cadastral Surveys which, in 1923, contained 250 officers and a school capable of providing trained men for Forest, Mines, Irrigation and all other surveys.

The Royal Irrigation Department, one of the branches of the Ministry of Lands and Agriculture, has not

arrived at its present state of development without passing through the various stages of progress and relapse characteristic of the Siamese Government. It came into existence in the year 1904, when it was organised by an officer of the Netherlands India Waterstaad, lent by the Dutch Government to Siam. This officer drew up with much skill an elaborate project for the irrigation of the greater part of the valley of the Menam Chao Phraya but the Government, fearing the very great expenditure involved, shied away from the problem as a whole and adopted as a half-measure the improvement for traffic of existing canals, and the canalisation of certain creeks, which would form part of the main project if it should ever be executed. The Department carried on for six years, by the end of which time it had improved inland water traffic very much but had allowed the idea of irrigation to drop entirely into the background. It was then transferred to the Ministry of Communications and became a mere branch of the administration of highways. But the strongly-worded report of a Royal Commission appointed in 1912 to inquire into the resources of the State, together with persistent agitation by the Minister of Lands and Agriculture, brought the question of irrigation forward once more, and in 1913 overtures were made to the British Government for assistance in technical advice and in money. The British Government at once lent the services of one of the foremost irrigation experts at its disposal who, in due course, produced a 'comprehensive project, or connected series of projects,' the complete realisation of which would irrigate all that part of Siam which is capable of rice-growing. Unfortunately, before any financial arrangements had been made, the great war supervened and for the time being destroyed all chance of obtaining foreign money for these projects, leaving before the Siamese Government the alternatives either of shelving irrigation once more or of

providing for the cost out of revenue. Very wisely the Government chose the latter course and at once set about executing a section of the project. In 1923 this section had been completed, supplying water to some 600 square miles of the richest soil in the country, and the Royal Irrigation Department was already busy with a further section, financed with English money.

The Forest Department has already been mentioned under the Ministry for the Interior. It was organised in 1896 by an officer lent for the purpose from the Imperial Forest Department of British India, with the object of checking the rapacity of persons who had obtained leases to extract teak timber in the forests of Northern Siam. The British officer arrived in the country in 1895 and began by making an exhaustive inspection, during the course of which the lessees, foreseeing the advent of control, exerted themselves to the utmost and succeeded in girdling a large quantity of forbidden timber. As the result of his inspection the British officer strongly advised the immediate formation of a State Forest Department, a step which the Government, in spite of opposition from interested quarters, was wise enough to take. The Department, attached temporarily to the Ministry of Interior, was manned chiefly by officers borrowed from Burma and at first had its headquarters at Chieng Mai. There was much work for it to do for, not only had the leased forests to be constantly inspected as a check upon the girdling of forbidden trees and other infringements, but the extraction of timber in unleased or reserved forests, which in the absence of control had become a general practice, had to be stopped without delay, and the stopping gave rise to many boundary disputes. Moreover, much survey and exploration work was necessary to place the Department in possession of full information as to the nature and extent of the forests placed under its control. Gradually the

Department got the situation in hand and, after the revision of leases that took place in 1901, was able to lay the foundations of a regular policy of teak conservancy which has developed that product into a constant source of revenue and an increasing asset of the State. About 1910 the energies of the Department were extended to the other valuable sylvan products of the country; the headquarters were transferred to Bangkok, and Forest officers were posted to districts containing forests of timber other than teak. The Department thus came more closely into contact with agricultural, mining and other interests controlled by the Ministry of Lands and Agriculture, so that when in the course of time its transfer to that Ministry was effected the change was looked upon with general satisfaction. In 1922 the Forest Department was still under the direction of a European and contained some half-dozen Englishmen in its ranks. By a system of careful and consistent selection and education it had, however, created for itself a body of Siamese officers of proved capacity and technical qualifications, to whom it was felt that the destiny of the Department might safely be entrusted in due time without foreign assistance.

The Royal Department of Mines and Geology was inaugurated by Royal Decree in 1890. On the formation of the Cabinet of Ministers in 1892 it was placed under the Minister of Agriculture, but a few years later was transferred to the Minister of Finance. In 1899 it became an appanage of the Ministry for the Interior, and in 1908 returned to the Ministry of Lands and Agriculture.

During its first years the Department was fully occupied in overhauling the mass of concessions which had been made previously, in introducing the elements of order and system among them, and in exploring the country with a view of obtaining a rough knowledge of the mineral resources of the kingdom. These were

found to be heavy labours, for the concession hunter, unused to any but the most perfunctory control, was loath to lay bare before the Government his schemes for the development of his, sometimes irregularly acquired, rights or to fulfil the easy conditions under which he held the same, while the absence of information, the want of communications and the withholding of assistance by the civil authorities and local magnates made the work of exploration one of frequent disappointment and failure. In time, however, these difficulties were overcome and a Mining Act was passed, substituting a uniform system of prospecting licenses and mining leases for the old vague and irregular method of granting rights by concession, and securing adequate State control of, and interest in, all mining propositions. The Siamese mining laws have not been without their foreign critics, some of whom, more especially experts from the United States of America and from Australia, have remarked that, with their manifold restrictions, they have the air of laws made to discourage, rather than to encourage, mining. Such individuals seem, however, to overlook the enormous difference between conditions in Siam and in their own countries, and the peculiar difficulties with which Siam, whose mining population is almost entirely foreign, has to contend.

The fact is that the Mining Act, which has now been in force for many years, while admittedly by no means perfect, has been found generally suitable to the present requirements of the country. The Department charged with executing it is fully organised, and, allowing for a certain slowness due largely to the fact that the individuals it deals with are usually hampered by international treaty reservations and obligations, it controls the industry fairly well. Its executive officers, from the Director downwards, are all Siamese with, an English Inspector-General and several Inspectors, whose functions are chiefly advisory.

THE MINISTRY OF COMMERCE.

From time to time untoward happenings have impressed upon the more thoughtful Siamese statesmen the fact that the Government has not been sufficiently cognisant of the methods by which the modern commerce of the country is conducted, but has allowed this very important factor in the country's welfare to follow its own, often devious, courses without much encouragement and also without check. The care and control of matters affecting trade were rather vaguely supposed to be part of the duties of the Ministry of Lands and Agriculture, a Department of Commerce (inactive) being, in fact, an appendage of the above Ministry. But as, in the early days of the reformed administration, trade was very largely in the hands of foreigners enjoying extra-territorial rights, it was found that the least possible interference was usually the most practical policy to follow, and consequently little or nothing was done in the matter. Times changed, however; extra-territorial rights were abandoned by several Powers, Siamese subjects entered more into commerce and the State found itself called upon to take more concern in the conduct of commercial affairs. One by one, trade laws such as a Law of Contracts, a Companies Law, a Trademarks Law and other regulations were passed. These, however, were administered by various Departments without any cohesion and, though a Department of Commerce came into existence under the Ministry of Finance as a result of the banking catastrophe in 1913, very little real improvement came of it, partly because, the business of the country being so largely agricultural, Government never could find the demarcation line at which Agriculture leaves off and Commerce begins, while anything like co-operation between Departments under different Ministers was practically unknown. The solution of this difficulty lay in the proper develop-

ment of the Department of Commerce already existing *in embryo* in the Ministry of Lands, Agriculture and Commerce; but, for various reasons, so simple a remedy did not appeal to the authorities, and in 1920 a more complicated scheme was devised for bringing about the necessary co-ordination. The Department of Commerce under the Ministry of Finance was raised to the status of a Ministry, the administration of all trade laws and cognate matters was vested in it, and a Board of Commercial Development was created, of which the Ministers of Finance, Agriculture, Commerce, and the Heads of the great productive Departments were members, where all projects dealing with production and trade should be considered and dealt with in the sight of all those who might be called upon to contribute to the successful working out of the same. The Board started work without delay, and by the end of the year had begun to encourage hopes that a way to circumvent some of the chief obstacles to material progress had been discovered.

The Ministry of Commerce, besides the administration of the laws mentioned above, controls general statistics, a co-operative credit system, a General Analytical Laboratory and the reorganisation of weights and measures.

Statistics. The Statistical Department has already done good work in instructing the various Departments of Government in methods of collecting statistics concerning the matters within their jurisdiction, and in correlating and publishing the same in the form of a Year Book the value of which is coming to be fully recognised. Other statistical compilations are in progress.

Co-operative Credit. Several societies have been inaugurated on the Raffeisen system amongst the agricultural classes, and much energy and industry are expended by the officials concerned in trying to convince the naturally thriftless population of the

advantages of the institution. The money-lending members of the community, consisting of wealthy Chinese and the aristocracy, are against this innovation, as might be expected, and offer towards it all that they dare of passive resistance. This, however, is not likely to persist in the face of Government perseverance, and with proper care and assiduity the measure may be expected to achieve in time a degree of success perhaps equal to that which has attended the unrelaxing efforts of the Government of Burma in the same direction. The scheme at first was much hampered by lack of sufficient capital, but in 1922 the difficulty was surmounted by the devotion of part of the foreign loan of that year to this useful purpose.

Government Laboratory. This institution was originally the assay office of the Royal Mint. Gradually it became the custom for the various Departments of the Government to resort to it for all manner of mineral assays, and in course of time, to fill a pressing need, the office undertook also the analysis of substances other than mineral. Thereafter it was attached to the Department of Commerce under which it was developed into a General Analytical Laboratory with special facilities for agricultural work.

Weights and Measures. The unofficially accepted standard weights of Siam are simply the silver coinage. The unit of weight is the *baht* or tical which equals 15 grammes weight, or practically half an ounce Avoirdupois, and herein may perhaps be found the derivation of the word "tical" which has puzzled many people, for it would seem probable that the word was brought to the country by merchants accustomed to trade on the East Coast of India, where the "Tikul," a weight almost exactly equal to that of the tical, is still in common use. The "Tikul" is also mentioned in Syme's *Mission to Ava* as a weight in use in Burma at the time dealt with in that work. The *chang* which, as has been said above, equals eighty *baht* or about

forty¹ ounces Avoirdupois, is a unit of weight in retail trade, but the Chinese catty, equal to half a *chang*, is more commonly used. Fifty *chang* make one *hap*, known in commerce as a picul, the common weight of wholesale trade, and equal to 133½ lbs. Avoirdupois. The Siamese word *hap* means "to carry a burden, half of which is slung from each end of a carrying pole or stick, balanced across the shoulder"; hence a "man-load," as indeed does the word "picul" in the Malay language. The silver coins of value below that of the *baht* supply a series of smaller weights. Weights of bronze in the forms of elephants, birds, lions, etc., are made for use with ordinary scales, but these are not so much employed as the balance known in Siam as *Trachang* and in Malaya as "Daching," the one name probably a corruption of the other, which is a graduated rod having a pan at one end and a string close to it by which the contrivance is suspended, and a weight sliding on the rod, the whole working on the same principle as the Fairbairn weighing machine. For weighing quantities smaller than can be dealt with by the *juang*, that is less than one eighth of a *baht*, the red and black seeds of *Abrus precatorius* or "crab's-eye bean" (in Siamese *hun*) are used, each of which is very roughly equal to two grains. The employment of this seed for weighing small quantities of gold, precious stones, drugs, etc., is not confined to Siam, being common also to India, Burma, and other Eastern countries.

Linear measure is based, as has at one time been the case in practically every part of the world, upon the length of certain parts of the human body, but whereas, in Europe at any rate, the measures have long been standardised, in Siam, so far as the law is concerned, each man may be a standard unto himself. The least measure of length is the *anu-krabiet*, two of which equal a *krabiet*. Four *krabiet* make a *niu* or a finger-width, and twelve *niu* amount to one *kenap* or

handspan. Two *kenap* make a *sauk* or cubit, the length from the elbow to the end of the fingers, and four of these make a *wa*, the full stretch of a man's outspread arms. Twenty *wa* make a *sen* and four hundred *sen* make a *yot*. For purposes of land measurement former kings have attempted to standardise the linear measure by establishing a "Royal *Sauk*," possibly the length of their cubit, but such standards were never rigidly enforced, and for private business a salesman is entitled to use such measure as he can induce customers to accept. Some years ago, however, the Royal Survey Department adopted a *wa* equal to two metres, and this measure, according to which the surveys of the country have been made, is now in fairly general use, though it has not been legalised.

For Square Measure the unit is the square *wa*, one hundred of which are equal to one *ngan*. Four *ngan* equal one *rai* or two-fifths of an acre. For a long time the people have been accustomed to consider their rice lands in terms of *rai* and *ngan*, but not their orchards and gardens which they described as of one or more *khanat*, a perfectly vague term meaning simply "size." Civilisation with its increased cupidity and higher land values, has weaned the people from such simple ways, and every buyer, no matter the use to which the land is put, is now fully aware of the most exact measurements of the same before he pays for it.

The only thing for which the average Siamese considers any systematic measurement of capacity at all necessary is rice or paddy, and, even for this, the system that time has evolved for him is of an astonishing looseness. The cultivators' measurement for paddy begins with a handful, several of which, nominally eight, make a coconut-shell or *Tanan*. Some *tanan*, anything between twenty and twenty-five according to the district or the season or the chances of trade, equal one *sat* or basket and eighty *sat* equal one *kwien* or cartload. The difficulties of the rice trade

are considerably enchanced by the fact that each buyer keeps his own *tanan*, the largest coconut-shell he can find, and it is his main object in life to convince sellers that it contains no more than the proper quantity, while sellers on the other hand strive to deceive the buyer with a coconut-shell of diminutive proportions. The rice-miller's measure differs from that of the cultivator, having from thirty-two to forty-two *tanan*, according to the state of the market or the gullibility of the seller, equal to one *Tang* or bucket, which may be said roughly to equal a half-bushel, and eighty of which equal one rice-miller's *kwien* of paddy, a weight somewhere about a ton. Husked rice for local consumption is measured by the *tanan*, the *pip* (or kerosine-oil-tin), the *tang*, the *krasop* (or bag), and by other equally indefinite receptacles. For the export trade it is considered in bags and, as an added precaution, by weight.

The cubic measure used in the teak trade is peculiar, the unit consisting of the *yok*, sixty-four *sauk* in length, one *sauk* wide and one *niu* deep, or about eleven and a half English cubic feet.

In the midst of the reforms of recent years the Government has not been unmindful of the fact that reorganisation of the national weights and measures is a matter of urgency. Three times in the last thirty years or so has a Royal Commission been appointed to inquire into the matter and report to the King as to the direction which reform should take. Advice invariably pointed towards the introduction of the Metric System or some System closely allied thereto, but for one reason and another a quarter of a century was allowed to pass before any definite resolve was arrived at. At length, however, His Majesty was pleased to decree that a legalised System with suitable standards shall take the place of the old forms of weights and measures as soon as the change can be made, and in 1923 the Ministry of Commerce had a law to that effect

drafted and under consideration. The reform, which will not necessarily include the decimal divisions of the Metric System, must, of course, benefit trade immensely, for it need scarcely be said that the business of the country is considerably hampered by the absence of all legalised weights and measures.

Divisions of Time. There are two eras in use in Siam, the *Phra Putta-Sakarāt* and the *Chula-Sakarāt*. The first is the Religious Era and dates from the attainment of Nirvana by the Buddha in 543 B.C. and the second is the Civil Era dating from 638 A.D., said to have been invented by the hero king Phra Arunawati Ruang of Sukhothai, but more probably introduced into Siam from India, via Burma where it is still in use. Thus the year 1921 A.D. was 2464 of the *Phra Putta-Sakarāt*, and 1282 of the *Chula Sakarāt*. The first is used in connection with religious and official matters, while the second is the popular form of reckoning. There is a third era, the *Maha Sakarāt*, an old Brahman system, once in use throughout Further India, but now practically unknown in Siam except to students of ancient literature where mention of this, and of yet other, still older and now practically forgotten eras, appears occasionally. The late King Rama V, in the year 1889 A.D., introduced for the glorification of his dynasty a civil era dating from the establishment on the throne of King Rama I, in the year 1789. This era was used for all official purposes for about twenty years but, shortly after the accession of King Rama VI, was abandoned in favour of the *Phra Putta-Sakarāt*.

The years are grouped into cycles of sixty, divided into sub-cycles of twelve to each year of which latter the name of an animal is given, and also into decades numbered from one to ten. Thus the name of each of the twelve animals recurs five times in a cycle but each time has a different decade number attached to it. The *Phra Putta-Sakarāt* computation has been modern-

ised so that it corresponds as regards the length of its months and the number of its days with the Gregorian Calendar. The year begins on the 1st April, and the twelve months are called after the signs of the Zodiac.

The months according to the ancient eras are lunar, being reckoned from moon to moon. Those of the *Chula Sakarat* are known simply as First Month, Second Month, and so on up to the Twelfth Month, the New Year beginning, however, with the Fifth Month. The year consisting of only 354 days, an additional month is added every third year to keep the system in correspondence with the actual seasons. The nights of the months are numbered and not the days, and are divided into two sets of fifteen, the first following the waxing moon and the second the waning. The nights of the waxing are called *kheun*, and those of the waning *raam*.

The week is of seven days, to which names culled from Brahman Mythology and bearing a close relation to those of the European system, have been given.

The popular division of the twenty-four hours of each day is into two equal parts, that is, as twelve hours of day and twelve of night. The hours of day begin after six a.m. and are numbered, "one hour morning," "two hours morning," etc., up to six which is usually called simply midday without a number, then, "one hour afternoon," "two hours afternoon," etc., to six or "nightfall." From "nightfall" the night begins, seven p.m. of the European system being called "one hour night," eight p.m. "two hours night," and so on until "twelve hours night," or six a.m., is reached. The word "hour" is known as *Mong* if a day hour, and as *Thum* if a night hour. The hours of nine p.m., midnight, and three a.m. are also commonly called the first, second and third watches, or *yam nung*, *song yam*, *sam yam*. The end of the third watch is called *Yam Rung* or the

"striking of the dawn," the arrival of which moment is heralded by every guard, sentry or night watchman on duty, and in every monastery, by the entergetic thumping or beating of any drum, gong or other resounding instrument within reach; so that the arrival of each day may be said to be well and truly announced and made known to the people throughout the land.

For official purposes the above system has been replaced by the very simple method of counting the hours from one *kawn tieng*, or a.m., to twenty-four *lang tieng*, or p.m., but this, though in use in the Government offices, is not at all used by the general public. An hour is divided into sixty minutes or *nati*, consisting of sixty *winati* or seconds. Also six minutes are sometimes called *bât*, but this last expression is not often heard.

THE MINISTRY OF JUSTICE.

Previous to the institution of the Cabinet of Ministers, one member of which is the Minister of Justice with powers extending in theory to the control of all the Courts of Justice in the Kingdom, the Head of each Department of the Government had under his orders a Court, or Courts, in which the affairs of persons under his authority were dealt with, and of which the chief himself acted as first Judge whenever he chose to exercise his functions. In the interior each Governor or Provincial Chief had his own Courts wherein cases were decided in such manner as he might desire rather than in accordance with equity or with the law. The active officials of the courts were generally persons of mean birth, mere satellites of the chief under whom they served, men of little education and less legal knowledge, who eked out a precarious existence by a slavish obedience to the will of their master, receiving as payment a small portion of the

finer they levied or an occasional share of the money paid by parties as the price of their decisions. But though the corrupt state of the judicature was notorious, the procedure was wrapped up in innumerable forms and observances intended to produce a superficial appearance of honesty, and the duties of the Courts were divided up amongst a number of officials who were supposed to act as checks upon each other by rendering it impossible for any single individual to control more than one of the various stages of any case. Thus each Court had its Prosecutor, or *Yokrabat*, its Recorders, or *Tarakarn*, its Interpreters of the Law, or *Luang Peng* and its Deliverer of Judgment, or *Pu Prap*. At the Capital there was a kind of High Court, the *Luk Kun*, which controlled the work of the Ministerial Courts and passed judgment in cases committed to it after the taking of evidence. The *Luk Kun* was also the Court of Appeal, the King sometimes sitting there in person to hear appeals. The system had all the appearance of a thorough and comprehensive machine, but was unfortunately quite unworkable. The number of cases which found their way before the *Luk Kun* was comparatively small, the great majority being kept pending in the lower Courts until the parties, having expended much money in bribes and fees, usually effected some sort of compromise. In criminal matters it was customary to detain both the accused and the complainant, and sometimes even the witnesses, in custody pending trial of the case, and as recently as the year 1900 A.D. the provincial prisons contained many persons who had got into them as complainants in criminal cases and, having failed to raise amongst their relatives and friends the funds necessary to bring their case to a hearing, had remained in prison, in some instances for many years, working at prison labour side by side, perhaps, with the very individual against whom their complaint had been made. All prisoners were fed by their

relatives, the Government not providing food. The prisons were small, dark hovels, always overcrowded and without the smallest pretensions to sanitation. Discipline, however, being practically non-existent, the prisoners could often arrange to sleep outside the jail whence, naturally, frequent escapes resulted.

With the establishment of the Ministry of Justice in 1892, the knell of the ancient judicial system was sounded, but the introduction of reforms met with many grave initial difficulties and it was not until the end of 1894 that a new scheme of judicial administration had been drawn up and sanctioned and new Courts, constituted in accordance therewith, had been established, even in Bangkok town. The Courts then organised consisted of two Magistrates' Courts, a central Criminal Court, a Civil Court, a Court of Foreign Causes for the disposal of cases in which the complainant is a foreign subject, a Court of Appeal and a Supreme Court of Appeal, *San Dika*. At the same time an Attorney General's Department was also created, and the Bangkok prisons were taken over by the Ministry of Justice and reorganised. In 1897 a start was made with the extension of the system beyond the Capital. The suburban provinces were taken in hand first, and work of an experimental nature was carried on there and at Ayuthia until experience had been gained, errors corrected and such improvements introduced as appeared necessary. The outlying Circles were then gradually brought under the jurisdiction of the Ministry and its sway now extends to the whole kingdom. In 1897, also, a Royal Commission was appointed to investigate the condition of the rural prisons, which resulted in the clearing up of many cases of long standing and in the release from undeserved durance of some hundreds of persons.

The provincial judicial scheme as now in force provides a Court at the headquarters of each province or *Changwad*, and a central Court at the chief town of

each Circle, or *Monton*. Appeal can be made from the *Changwad* Courts to the *Monton* Court, from which further appeal lies to a Special Court of Appeal for the Provinces, established at Bangkok, whence final appeal may be made to the Supreme Court. The system works fairly well, and, judging by the annually published returns of cases dealt with, gets through a lot of work. It is, however, very much handicapped by the want of enough intelligent, trustworthy and experienced men to fill the numerous judicial offices. The Law School which was inaugurated many years ago, and which was supplied with a series of excellent text-books prepared by the then Minister of Justice, now turns out every year a dozen or so of young men who are considered eligible for the junior judicial appointments. These youths become judges of *Changwad* Courts, where, though their judicial powers are very limited, their position is one of an independence and a freedom from control which sometimes proves too much for their tender years and inexperience. The *Monton* judges, also, are frequently young men taken from the *Changwad* Courts before they have had time to gain experience.

Under the stern rule that obtained during the earlier years of reform, such of these young judges as left the straight path found that condign punishment invariably followed the discovery of their sins, and found, moreover, that the usual methods by which the wrath of official superiors is turned aside in Siam availed them less than nothing in the sight of the keen young lawyer-prince to whom the reform of Justice had been consigned. And hereupon there grew in the hearts of these youths a mortal dread of their chief which, in the case of those who survived the remorseless weeding-out process continually at work amongst them, changed to deep respect, admiration and finally affection. Thus was formed a basis on which the Minister built up a service, probably the cleanest and

straightest Siam has ever seen, and containing in its ranks officers who could compare favourably with the members of the justiciary of many European countries. In fact, about the year 1909 the Ministry of Justice was the bright particular star in the administration of the country, a fact which doubtless counted for much in the determination of Great Britain to abandon extra-territoriality. And, upon the retirement of the Minister in 1910 it soon became evident to how great an extent this state of superiority was due to his personality, for, in the hands of his successors, the Ministry of Justice declined and in time fell from above to rather below the level of the other State Departments. The death of this Prince (Rabi) under very sad circumstances in 1920 was regarded by many as a national calamity, and amongst the mourners at his final obsequies the men he had ruled with stern, impartial justice in his old Ministry were conspicuous.

In his work of judicial administration the Minister of Justice is assisted by an English Judicial Adviser, and by a number of Legal Advisers of various European nationalities, who assist the judges in their work or act as inspectors of the rural Courts.

Side by side with the ordinary Siamese Courts are the various tribunals to which the subjects of foreign nations resident in the country are amenable. Until recently these tribunals were roughly of a uniform character and consisted of National Courts established by the European Powers, by the United States of America and by Japan by virtue of treaties with Siam, and of International Courts in certain parts of Northern Siam having jurisdiction over British, Danish and Italian subjects. Of late, however, France, England, Denmark and the United States have abandoned certain of their extra-territorial rights, and apparently intend to do so entirely as soon as the laws of the country shall have been satisfactorily codified, and though this innovation must upon its completion

simplify matters immensely, the present transitory state is one of complications. Thus, with regard to British and Danish subjects, the Consular Courts formerly having jurisdiction over these are suspended and all such subjects who were registered prior to the passing of the final treaties are now amenable to an institution known as the International Courts, while those who are registered after the passing of the Treaties are amenable to the ordinary Siamese Courts. The International Courts consist of the ordinary Courts with the addition of the Consul of the foreign subject concerned, the Consul having the right to sit in Court and act as an adviser if he thinks necessary, or to stay proceedings and transfer the case by evocation and try it himself, calling the Consular Court out of abeyance therefore. It is stipulated that in all cases in either class of Courts in which a British or Danish subject is accused or defendant, a European Adviser shall sit on the Bench with the Judges and, in case the foreign subject be a European, shall act not only as Adviser but as a Judge whose opinion shall prevail over that of the rest of the Bench.

For French subjects the arrangements are rather more intricate, for the French Consular Court still exists with jurisdiction over all subjects born in France, while the Asiatic subjects and *protégés* of that Power are subject to the same jurisdiction as that provided for British and Danish subjects. There is, however, a proviso that in Eastern Siam no Asiatic French subject or *protégé*, whether registered before or after the latest Treaty, is amenable to the ordinary Siamese Courts, all such being under the Jurisdiction of the International Courts only.

Appeals from the International Courts lie in the ordinary Siamese Appeal Court of Bangkok, but the Consul of the foreign subjects involved is informed of the proceedings, and all findings must be signed by two European Judges of Appeal.

The case of subjects of the United States of America is more simple. By the Treaty of 1921 all American subjects in Siam are made amenable to the ordinary laws and Courts of the country.

Meanwhile the other Powers, Dutch, Portuguese, Japanese, Norwegian, Swedish, Italian, who have not surrendered extra-territoriality, continue to exercise jurisdiction over their nationals and *protégés* and to administer in their Consular Courts their own particular laws ; but it is probable, more especially since Germany and her allies and Russia have at present no rights at all in the country and will certainly never again enjoy anything in the least like extra-territoriality, that the end of this peculiar system approaches so far as concerns Siam.

In 1909, when Great Britain took the lead and bartered her extra-territorial rights in Siam, the other Powers thought her mad, the Siamese thought she must have in mind some deep-laid scheme for their destruction, while the British subjects in Siam thought her beguiled by Siamese cunning and themselves abandoned and undone. All were wrong, however, for a dozen years later, British subjects found their lives and property in no particular danger and themselves in possession of commercial and other rights which they could not have had in the days when they enjoyed the benefit of English judges and laws ; the British Government had developed no wicked plot for the ruin of Siam ; and, far from still considering her mad, several of the other Powers had followed England's example.

The ancient laws of Siam, in common with those of Burma, Kambodia and in fact all Further India, were derived from the Hindu code of Manu, having been framed in accordance therewith by sundry earnest rulers of remote times and subsequently rearranged and brought up to date by their successors. The most celebrated Siamese promulgator of such

laws, always excepting the mythically versatile Arunawati Ruang, was King Ramathibodi, the first sovereign of Ayuthia, who undoubtedly edited and issued numerous excerpts from the ancient sources, some of which, after some 560 years of continuous use, are still actively in force. In collecting these laws and publishing them in book form, together with a selection of the decrees and ordinances of later kings, H.R.H. the late Prince Rabi of Rajburi, Minister of Justice from 1897 to 1910, rendered a service to the country which it is impossible to overrate for, though some of the laws have recently been repealed by enactments more suitable to modern requirements, and many more will disappear when the codes are passed which are going to place Siamese laws on a modern basis and do away finally with the *raison d'être* of extra-territoriality, yet these compilations enabled the Government to carry out the first reorganisation of the Law Courts, placed the principal laws of the country within the reach of the public, and provided text books without which no systematic teaching could be undertaken. To this work, in fact, the Law School and its graduates, who, in spite of faults, are a vast improvement on the old judiciary, are entirely owing. The Government, however, did not merely content itself with enforcing the ancient laws when reorganising the administration of justice, for included in the volumes published by the late Minister are many enactments which have received the Royal assent during the last twenty years or so, of which a few of the more noticeable are the Law of Civil Procedure; a Law of Evidence; Administration Decrees including Rural Government, Police, Harbour, Quarantine, Pawnshop, Hackney-Carriage and Anti-Slavery Ordinances; Revenue Laws; Mining Laws; Land Registration Laws and Laws of Mortgage and of Bankruptcy.

In 1908 a new departure was marked by the passing of a Penal Code, the first real step towards a regular

codification of the laws of the country. This code, having been under construction for many years, was ultimately completed by the Code Commission of French lawyers, appointed about 1905. It was published in English and French as well as in Siamese, has been submitted to a wide criticism and has been universally recognised as a thoroughly sound piece of legislation, reflecting credit upon its compilers and upon the State which has acquired it. The Codes of India, Japan, Belgium, Italy, Hungary and France have all been placed under requisition in the compiling of the work, which is nevertheless informed throughout its 340 sections with the best traditions of Siamese law, and the whole is a combination of Eastern and Western ideas, the suitability of which to the conditions of modern Siam is being proved daily by application in the Courts.

After seventeen years of placid existence the Code Commission still pursues, in a leisurely manner, its work of a general codification of the laws, the result to include, as well as the Penal Code now in force, a Criminal Procedure Code, a Civil Procedure Code, a Commercial Code, a Law of Judicial Organisation, etc. From time to time the country is reminded of its existence by criticisms of the efforts of various Departments to overcome, by temporary Decrees, difficulties caused by the continuing absence of the Codes; otherwise the Commission seems to subsist in a state of calm, undisturbed by inconvenient ambition or by too much desire of achievement.

When, at last, the Codes are made; and it is still hoped, despite appearances, that before very many more years have gone by the most important measures may be passed and, put in operation, the recognition of the Siamese Laws by all the Powers may be expected to follow, and the end of extra-territoriality in Siam, be accomplished.

THE MINISTRY OF WAYS AND COMMUNICATIONS.

The Ministry of Ways and Communications, which is the former Ministry of Public Works reorganised, includes the State Railways Department, the Post and Telegraphs Department and the Department of Highways.

The Railways Department and its work is dealt with in Part I, Vol. II, under the heading of Transport.

The Postal system now in vogue was inaugurated in 1881 under Royal decree. Before that date there had been no Government post offices, foreign mails for Siam being sent thither through the instrumentality of the Government of Singapore and the British Consulate in Bangkok. Letters could be posted in Bangkok for the outer world, but were stamped with a British Straits Settlements stamp surcharged with the letter "B," specimens of which are now rare and in consequence much prized by stamp collectors. In 1885 Siam joined the Postal Union, and in that year a new law was passed replacing the first Decree and providing for the proper organising of the Department. An official of the German Postal Service was engaged to assist in the management of the Department, and under his guidance, at first as Adviser and later as Director, it grew steadily until every place in the interior of any importance at all had been brought into postal communication with the capital. The Director was compelled on account of ill-health to resign his position in 1909, when a Siamese Director-General was appointed.

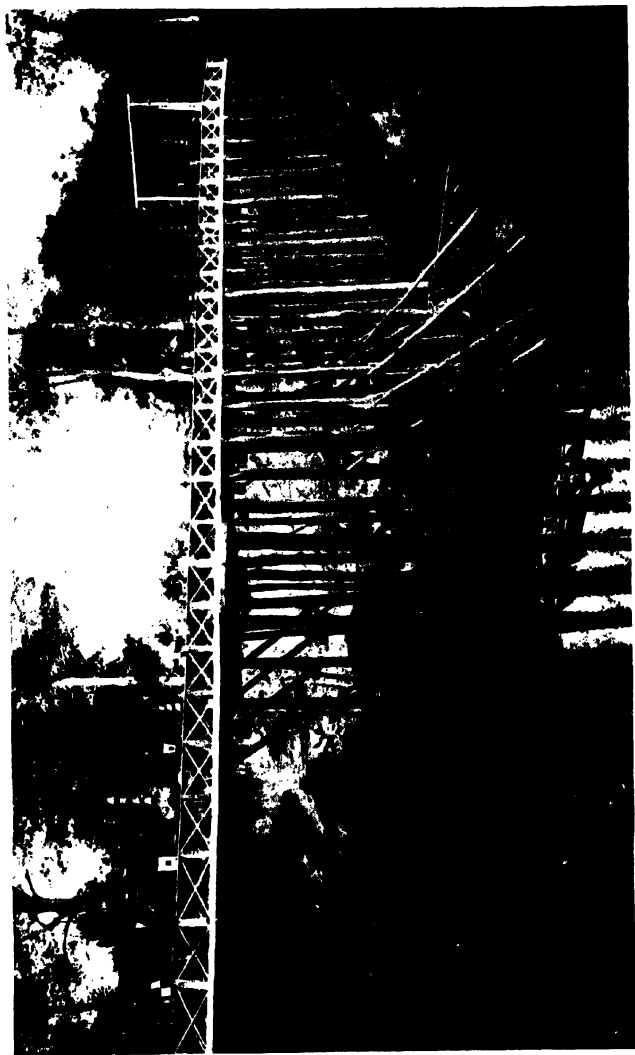
For many years the foreign mails all found their way to and from Siam in any ships that happened to be leaving port and going in the desired direction at the moment when a mail was ready to be despatched, and no contract for this duty was ever made with any shipping line. That method still persists for mails going eastwards to Hongkong and elsewhere, but

correspondence with Europe is now managed on a somewhat more methodical system, arriving and departing by the train service connecting with the British port of Penang. The total number of letters, postcards and other postal matter passing through the post offices in a year amounts to about three and a half millions inland and one and a half millions foreign, while money-order transactions in the same period amount in value to about a million and a half ticals inland and seven hundred thousand ticals foreign. In 1920 there were three hundred and seventy-five post offices and agencies in the country. Prior to the fixing of the exchange value of the local currency, much difficulty was experienced in maintaining foreign postal rates at a level with those laid down by the Postal Union, and at the same time securing a fair and reasonable revenue to the State, and it was frequently necessary to make issues of stamps with new local values, much to the delight of collectors but to the confusion of the postal accounts. When the value of the tical was fixed at one shilling and sixpence, the rates were fixed at 12 satang per 15 grammes for inland letters and 14 satang, or a fraction over $2\frac{1}{2}$ pence, per 15 grammes for foreign; but these amounts being found inconvenient for counting when the decimal coinage came in, the rates were changed to 10 satang for inland postage and 15 satang or very nearly 3 pence for foreign. These remained for some years, even after post-war conditions had forced the value of the tical up to two shillings and a penny. But in 1920 Siam took part in the International Postal Convention at Geneva where it was decided that all the Postal Union countries might double the foreign postage rate, and acting on this decision, though her rate of 15 satang was by that time equal to 3.7 pence, she increased it to 25 satang or a small fraction under $5\frac{1}{2}$ pence for half an ounce, which, as she has to consider 5 pence only in her settlements with the Postal

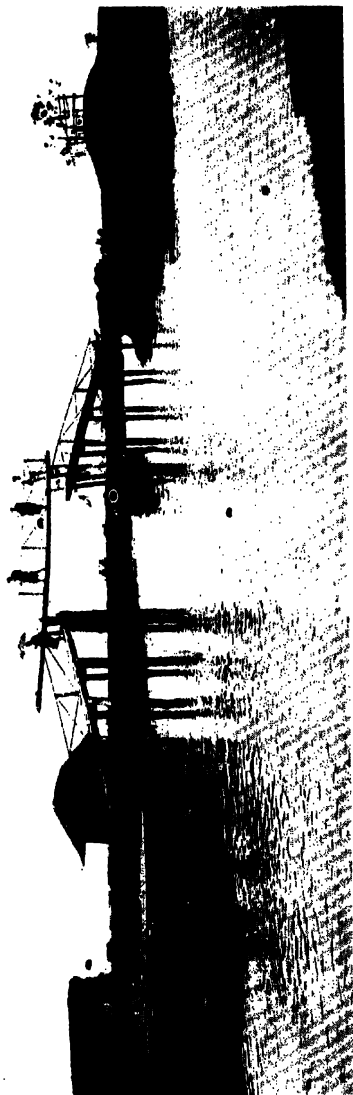
Union countries, is good business for the local revenues though it fails to amuse the commercial firms who contribute nine-tenths of the foreign correspondence. The inland rates remain at 10 satang with a 5 satang local urban rate.

The original Postal Law of 1885 was repealed by a more complete enactment passed in 1897 which, with the addition of sundry minor regulations, ensures a fairly efficient administration.

The first telegraph line of any importance which was opened in Siam was that which connects Bangkok with Saigon, the capital of French Indo-China. This line was engineered by the well-known M. Pavie, at one time engaged by the Siamese Government for this work, and afterwards one of the first French authorities on Siam, whose studies of the Siamese and explorations of the country have been of immense value to all who are interested in the ethnology, archaeology, and other scientific aspects of this part of the world. At the present day Siam has two other routes of telegraphic communication with the outside world in addition to that of Saigon, one of which crosses the frontier of Burma and thence reaches Moulmein, while the other enters the British Malay State of Kedah and thence communicates with Penang. Her inland telegraph lines link up all the more important provincial towns with the capital, and the total length of line in the country exceeds 3,500 miles. In its early days the Telegraph Department was very badly organised, and a great deal of money was wasted in the purchase and transport of expensive material which was never used. Union with the Postal Department brought better management, but even then the difficulties caused by the wild nature of the country to be traversed, the profuse and rapidly-growing vegetation, and the excessive heat and alternating humidity and dryness of the climate, delayed the initial construction work and made subsequent maintenance a matter of costly



OLD ROAD-BRIDGE IN EASTERN SIAM.



SWINGING FOOT-BRIDGE IN CENTRAL SIAM.

and unremitting labour. So great were these difficulties that, a few years ago, they appeared to be overcoming the energy of the Department, the lines being permitted to fall into a state of disrepair which rendered many of them practically useless ; but a remonstrance on the part of the Foreign Representatives, made in the interests of trade, put the Department on its mettle, and brought about a great and general improvement to which the extension of railways and the consequent transfer of several lines from their devious routes through the jungle to the open railway clearings has in no small degree contributed.

The Posts and Telegraphs Department is conducted at a loss to the Government, the annual expenditure amounting to about 1,400,000 ticals and the receipts to 1,100,000 ticals. The recurring deficit is, however, being reduced and will probably be converted into a surplus in the course of the next few years.

The Department of Highways under the Ministry of Communications is a quite recent development. In the good old days, when the Government regarded the provinces round Bangkok as the only part of the country that really mattered, and the more outlying parts as benighted districts of doubtful loyalty and small tax-paying capacity, no necessity for road construction was apparent. For roads in the low-lying and frequently water-logged home-provinces must be difficult of construction and costly to maintain and, if made, would be unable to compete with the very complete existing system of waterways, while the good that might possibly accrue from roads to the inhabitants of the hilly and distant parts of the country was held to be not worth the consideration of serious statesmen. A different policy prevails to-day, and in Northern and Southern Siam a body of earnest young men is at work, planning and making a network of roads, the chief object of which is to bring into touch with the new railways, distant plains and valleys of

great^o natural fertility, hitherto undeveloped because of their lack of communications with the outside world. For purposes of administration the Highways Department is linked with the State Railways.

GENERAL.

If there is one thing more striking than another amongst the changes wrought during the last twenty years in Siam, it is the evolution of the Siamese government official as encountered to-day. At the end of the last century the old custom still prevailed whereby many Heads of Departments regarded appointments under their control as so much munificent provision made by the State for their poor relations, rather than as positions from the holders of which a certain amount of work should be considered due. Thus many hopelessly ignorant and incompetent persons encumbered the Government offices, and all such clung tightly to the skirts of their patron. The periodical migrations of Ministers of State from one Department to another caused a general post amongst the lower officials which threw the services into grotesque confusion, and gave rise to the humorous stories of tide-waiters converted without warning into school-inspectors, and other changes of like nature, which were at one time current. Contented with little, and usually aware of their shortcomings as judged by the new standards, men usually considered the truly happy state as most likely to be found in a small position under the wing of a powerful Chief and with no responsibility attached to it. But if fate in course of time thrust them up from such a refuge to high appointments, then, aware of the mutability of human affairs, they immediately took such means as might be within their reach to enrich themselves at the public cost, and thereafter awaited with calm the discovery of their

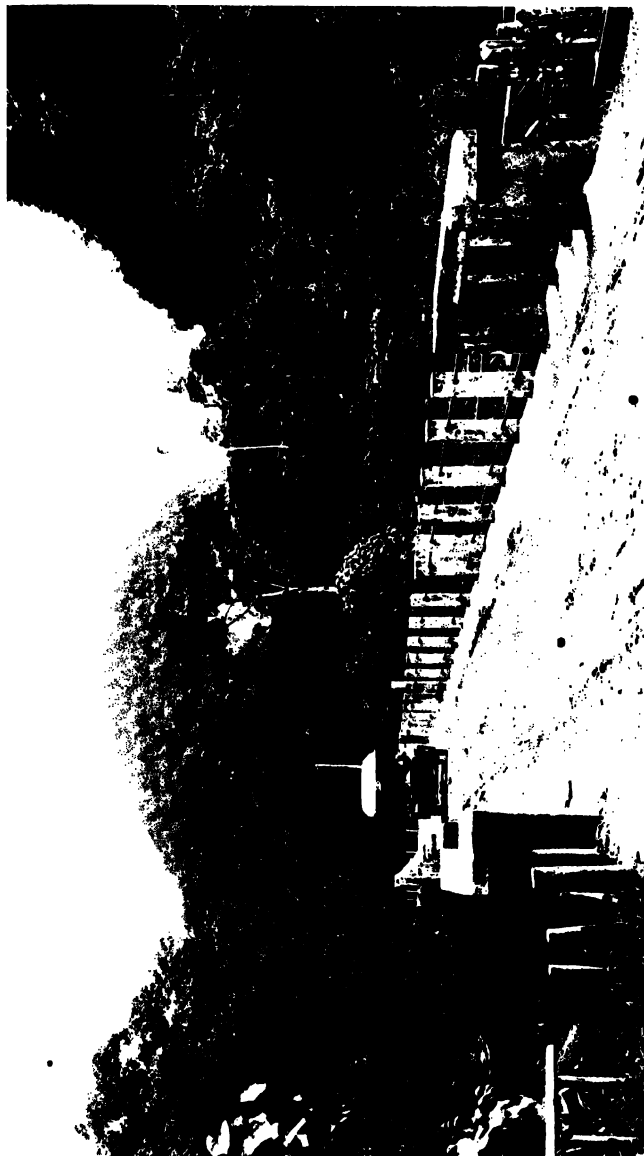


Photo: State Railways Dept.

THE SINGHA KEDAH ROAD, S. SIAM.

unfitness and its ultimate consequences. Meanwhile, the ship of State was steered by the few men of honesty and capacity, with a number of Europeans in executive control of Departments and as Advisers.

At present things are very different. The spread of education, though still far short of what it should be, has raised a crop of enthusiasts for whom responsibility has no terrors, and who, stimulated by the strong and recently aroused spirit of independence that informs the official class, are prepared to undertake any duties that may come their way. Nepotism still flourishes in the land, but it is a nepotism brought within reasonable bounds. Though many poor relations still live retired and comfortable lives in the quiet recesses of the offices of the great, some degree of capacity is now required for positions of any responsibility, and it is usually amongst the more educated and more able of his friends that a statesman now tries to distribute his higher gifts of office.

In the early days of reform Europeans were commonly engaged as Advisers or Teachers and, in the absence of Siamese officers of technical training or experience in administration, it was found necessary to appoint many of these foreigners to the control of Departments. Within the last few years, however, the growth of indigenous knowledge, courage and ambition, the recognition of the necessity to stand alone, and also a natural feeling of jealousy that so many of the best appointments in the country should be held by foreigners, have conduced to the gradual elimination of the latter from positions of actual control. Thus, though foreign Advisers will probably be retained to assist the work of the different Ministries for some years to come, while the Government will for a long time be unable to do without foreign engineers, schoolmasters, forest officers, medical officers, police officers, surveyors, and others on the establishments, the foreign official as Chief of a Government Depart-

ment will very shortly be an anomaly of the past. This, of course, is as it should be. A nation that is under the necessity of engaging foreigners to administer its Government, even temporarily, cannot expect to count for much, but one condemned to suffer such a state of affairs permanently would be simply an object of commiseration, unworthy of serious political or other consideration, and doomed to early extinction. The salvation of Siam as an autonomous State demands imperatively that she should govern herself, and, though Siamese officers may not in every case be able at first adequately to fill the place of the Europeans who have helped with the pioneer work, every well-wisher of the country must welcome the spirit which is calling forth men willing to assume the responsibility, and hope that time will prove them equal to the tasks they are undertaking.

INDEX TO VOL. I.

A.

Aborigines, 102.
 Abrus precatorius seed or *Hun*, 364.
 Absolutism of Monarchy, 232, 238, 305.
 Accounts Dept., 337.
 Admiralty Office, 319.
 Adolescence—Siamese, 159.
 Adverbs—see Grammar, 274.
 Advisers, 202, 383.
 Agricultural Dept., 355.
 Agricultural School, 253, 355.
 Agriculture, 353, 354.
 Ahoms of Assam, 236.
 Alabaster's 'Wheel of the Law,' 295.
 Alaung Phra (K. of Burma), 205.
 Alluvial Gold, 95.
 Alluvium, 94.
 Alphabet (Ariyaka), 265.
 Alphabet (Khom), 265.
 Alphabet (Siamese), 187, 263.
 Amarapura, 211.
 American High School, 256.
Ampō, an administrative district, 322.
 Amortisation funds, 352.
 Amsterdam, 202.
 Andaman Islands, 103.
 Angkor, 214.
 Anglo-French Agreement, 1896, 222.
 Anglo-Siamese Boundary Commission, 2.
 Angtong, 31.
 Annals of the North, 178, 182.
 Annals of Ayuthia, 179.
 Annam, 2, 214, 218.
 Annamese, 1, 107, 130, 203, 314.
 Antimony, 98.
 Ants, 86.
 Appeal Courts, 374.

Archaeology, 286, 298.
 Area of Siam, 5.
 Army, 312 *seqq.*
 Army cadet schools, 315.
 Army reform, 315-17.
 Arsenal, 320.
 Artesian Wells, 333.
 Artillery, 316-17.
 Arunawati Ruang (K. Phra Ruang) 186-188, 279, 367, 376.
 Asiatic French Subjects, 373-4.
 Assumption College, The, 256.
 Astrology, 279.
 Attorney Generals Dept., 371.
 Audience Chamber, Dusit Park, 24.
 Ava (Capital of Burma), 199, 205, 207.
 Ayuthia, or Krong kao, 8, 28-9, 110, 193, 195, 196-7, 205, 206-7, 223, 313, 371, etc.

B.

Baht or Tical, a coin or weight, 363-4.
 Baladep (*Bholadeb*), Chao Phaya, Title of Minister of Lands and Agriculture, 234, 353.
 Ballestier, United States Envoy, 217.
 Bamboo, 64.
 Banana, 59.
 Bandon, 4.
 Bang Pakong river, 6, 17.
 Bangkok, 21-26, 208, 211, 327, 329, 333-41, etc.
 Bangkok Port, 25, 336.
 Bank of Canton (Chinese), 343.
 Bank of Taiwan (Japanese), 343.

- Banking, 941-3.
 Banknotes—see Paper Currency.
 Banque de l'Indo-Chine, 341, 349.
 Bar of Menam Chao Phaya river, 14.
 'Barkalong' corruption of 'Phra Klang,' 337.
 Basalt, 93, 94.
 Bastian, Dr. A., 295.
 Bats, 70, 101.
 Battambang or Phra tabong, 3, 214.
 Beetles, 87.
 Betel, 55.
 Bibliography, 289-304.
 Birds, 74 *et seq.*
 Birth customs (Siamese), 157, 158.
 Board of Commercial Development, 362.
 Boat Registration, 336.
 Bodaw Phra (K. of Burma), 210, 211.
 Books (Nang Seu Dam), 185.
 Bookshops, 287.
 Boribhat of Nakon Sawan (Paribatra of Nagara Svarga), H.R.H. Prince, 316, 320.
 Boundaries of Siam, 2.
 Bowring (Sir J.), 23, 69, 295.
 Boy Scouts, 242-3, 257.
 Brahman, 124, 128, 180, 183, 261, 287, 367-8.
 Brahman Ceremonial, 180, 184.
 Brinjal, or Egg-plant, 52.
 British Empire, 2.
 British Government, 357, 373, 375.
 British in Malay Peninsula, 223-5.
 British Malaya, 2.
 Brooke (Sir J.), 217.
 Buddhism, 184, 261, 287, 295, 297, 363 (see also under 'Religion').
 Buddhists, 261.
 Buffalo, 73.
 Bureng Naung (K. of Pegu-Burma), 195-7.
 Burial: Semang, 118; Chao Nam, 121; Siam Malays, 125; Meao, 139; Muhsö, 142; Kaw, 144; Yao, 147; Karlen, 176.
 Burma, 1, 203, 219, 261-2, 331, 354, 358, 263, 375.
 Burma, War with, 200, 205, 210-11.
 Burney, Captain, 215.
 Butterflies, 88-89.
- C.
- Cabinet of Ministers, 305-7, 324-5, 337-8.
 Cadastral Surveys, 354, 355-6.
 Calcite, 93.
 Camoens, Portuguese Poet, 290.
 Canals or *Klong*, 18, 19, 24.
 Canes (Ratan), 61.
 Capacity (Measure of), 365.
 Cape Liant, 4.
 Capital (Ministry of the), 329.
 Carboniferous formations, 94.
 Carnivora, 68.
 Carter, A. C., 299.
 Cartwright's Siamese Grammar, 302.
 Cassiterite (or Tin Oxide), 96.
 Casuarina trees, 11, 56.
 Catty, a weight, 364.
 Celts, 102.
 Census, 113-115.
 Central Plain, 103.
 Central Siam, 7-8.
 Cha Cherng Sao (Petriew), 29.
 Chaiya, 19, 32.
 Chakkri Dynasty, 209.
 Chakrabongs of Pitsanulok, Prince, 316.
 Chan metre (see Poetry).
 Changwad (*Muang* or Province), 323, 372.
 Chantabun, 3, 4, 8, 29, 207, 221, 222.
 Chao (Chieftain), 26, 319.
 Chao Muang, 321, 323.
 Chao Nam (Sea Gypsy), 119-23.
 Chao Phaya (a title), 307.
 Chartered Bank of India, 341-3, 349.
 Chief of General Staff, 316.
 Chieng Kong, or Chieng Kawng, 93, 99.
 Chieng Mai, 13, 26, 92, 190, 194, 195, 196, 205, 210, 211.

Chieng Tung, 211.
 Chieng Rai, 20.
 Chieng Sen, 2, 92, 143, 145.
 Childhood (Siamese), 158-160.
 China, 109, 140, 256-7, 260, 289, 294, 341-3.
 China Sea, 2.
 Chinese, 25, 27, 29, 31, 97, 109;
 (Chow Chiew) 112, (Hailam) 113,
 (Hokkien) 113, 115, 145, 149,
 208, 212-13.
 Chinese Voluntary Schools, 256-7.
 Chino-Siam Bank, The, 343.
 Chira of Nakon Chai Si, Prince, 316.
 Chong tribe, 107, 137.
 Chula Chom Klao (Order of), 249.
 Chulalongkorn, King, (See Rama V.)
 Chulalongkorn Hospital, 334.
 Chulalongkorn University, 254.
 Chula Saka Era, 186.
 Chumporn, 4.
 Circle (Administrative Division),
 322, 371-2.
 Civil Service, 324.
 Civil Service Schools, 323, 331.
 Civil War, 204.
 Climate, 33.
 Clubs (Siamese), 242-3.
 Coal, 100.
 Coast line, 3.
 Coast lights, 336.
 Coconuts, 12, 61.
 Code Commission, 376-7.
 Coedès (Professor), 287.
 Coin, primitive, 343, *et seq.*
 Coin, fiat, 344.
 Coinage, Decimal, 345-6.
 Colbert (J. B.), 203.
 Commerce, 361, *et seq.*
 Commerce, Dept. of, 361, 366.
 Commerce, Ministry of, 366.
 Company Law, 373-6.
 Comptroller General's Dept., 337-8.
 Conjunctions—See Grammar.
 Conscripted Police, 330-2.
 Consuls not admitted, 215.
 Consul, First British, 217.
 Consuls, 26, 30, 336.
 Convent Schools, 256.
 Cooking, 157.
 Co-operative Credit Societies, 362.

DD*

Copper, 97.
 Copper Coin, 345-6.
 Coronation of H.M. Rama VI.,
 225, 245.
 Corundum, 94.
 Corvée, 235-238, 315.
 Costume. Semang, 117; Chao
 Nam, 121; Malay, 125; Khmer
 127; Môn, 129; Annamese,
 130; Lawa, 132; Kaché, 135,
 36; Meao, 138; Muhsó, 140-
 41; Kaw, 143; Yao, 145;
 Siamese, 151-4; Lao, 168-71
et seqq. Lü, 172, 246.
 Cotton, 40, 146, 175.
 Coup d'Etat, 204.
 Court, The Royal, 232-4, 244-6.
 Court, Supreme, 372.
 Courts of Law, Old Style, 369-72.
 Courts of Law, Reformed, 371-3.
 Courts of Appeal, 370-2.
 Courts, International, 373-5.
 Courts, Consular, 374.
 Cowrie Shells as money, 345.
 Crabs, 84.
 Crawford, J., 215, 294.
 Cremation, 143, 147, 164-6.
 Crime, 148, 332.
 Crocodiles, 79.
 Crow, 75.
 Crown of Siam, Order of the, 248.
 Crown Prince declared, 230-1.
 Cubic Measure, 366.
 Currency, 343, *et seq.*
 Currency Notes, 349.

D.

D'Albuquerque, 223.
 Damrong, H.R.H., Prince, 178,
 251-2, 281, 286-7, 324-5, 327-9.
 Danish Officers, 319, 326.
 Danish Subjects, 311, 373-4.
 Day, Division of the, 367-9.
 Death, 163-6.
 Decimal Coinage introduced, 346.
 De Chaumont, 291.
 Deer, 73.
 De La Jonquière, Comdt., 299.

De La Loubère, 147, 292, 300.
 Department of Education, 251-9.
 Departments of Government, 306
et seq.
 Department of Health, 334.
 Department of Commerce, 361.
 De Richelieu, Admiral, 319.
 Devawongse, H.R.H. Prince, 309-11.
 Dipterocarps, 40.
 Divisions of Time, 367.
 Divorce, 121, 163.
 Dong Phaya Fai, 13.
 Dong Phaya Yen, 97.
 Dravidians, 1, 105, 106, 112.
 Dugong, 74.
 Dusit Park, 24.
 Dutch, 1, 201, 202.
 Dutch East India Co., 202-3.
 Dvaravatti (Dwarapuri), 182.

E.

Earboring, 174, 176.
 Eastern Siam, 6, 8, 19, 30, 33, 93.
 Education, 159, 250-9.
 Electric Tramways, 336;
 Elephant, 14, 72.
 Emancipation of Women, 244-6.
 Emerald Buddha, The, 209.
 English, 2, 217.
 English Officials: Agriculture, 328-35; Education, 243, 251-3, 255-6; Finance, 327, 338; Forests, 311, 328, 358, 369; Irrigation, 357-358; Lands, 328; Medical, 335; Mines, 360; Police, 330; Revenue, 327; Survey, 355.
 English Money, 351-2, 357.
 Engineering School, 254.
 Era (Phra Putta Sakarat or Buddhist), 188, 367-8.
 Era (Chula Sakarat), 188, 368.
 Era (Maha Sakarat), 367.
 Exchange, 347-9.
 Expeditionary Force, Siamese, 227-8, 317-18.

Extraterritoriality Introduced, 217;
 French Claims, 220-1; British Position, 223, 224; Denmark Surrenders it, 227-8, 311, 361, 373-7.

F.

Family Names Decreed, 243, 244.
 Faulkon (or 'Pauhlcion'), C., 202-4, 292, 295.
 Faults, Geological, 92.
 Finance (Ministry of), 336-41.
 Financial Budget, 337.
 Finlayson's Journal, 294.
 Fish, 156.
 Fishing, 125.
 Flame of the Forest, 43.
 Floating houses, 156.
 Flying Fox, 69.
 Flying Lizards and Tree Lizards, 80, 121.
 Flying Lemur, 67.
 Flying Frogs, 82.
 Football, 243, 257.
 Forbes, Capt. C. J. F. S., 104, 111.
 Foreign Affairs, Ministry of, 306.
 Foreign Mails Service, 378.
 Foreign Mercenaries, 313.
 Foreign Officers (Army), 316.
 Foreign Officers and Experts, 326
et seq.
 Foreign Officers (Naval), 318.
 Foreign Policy, 227-8.
 Foreign Representatives, 226, 331.
 Foreign Tribunals, 371.
 Forest Department, 328, 356, 358.
 Fournereau, L., 178, 298.
 Franco-Siamese Frontier Commission, 3.
 Frankfurter's Siamese Grammar, 301.
 Frankfurter, Dr. O., 178, 286-7, 301.
 'Freemen' or Thai, *i.e.* Siamese, 110.
 French, 2, 203, *et seq.*, 220-1, 227, 256, 291, 308-11, 326-7, 341, 374.
 French Consular Courts, 374.
 French Indo-China, 2, 222.

French Officials (Engineers), 380.
 French Officials (Medical), 334-5.
 French Subjects, 374-7.
 Further India, 1, 104, 132.

G.

Galena, 97.
 Gambling (Public), abolished, 340.
 Gambling Revenue, 339-40.
 Garnier, Francis, 104, 296.
 Gazette, Government, 304.
 Gems, 99.
 General Adviser, Belgian, 309-10.
 General Advisers, American, 310-11.
 General Staff, 316, 317.
 Gendarmerie, 326, 329-30.
 Gendarmerie, Danish Inspector-General, 326.
 Gerini, Colonel, 289, 297, 299, 316.
 German Minister, 331.
 German Officials (Posts and Telegraphs), 378.
 German Shipping, 228, 320.
 Germany, 5, 98, 227-8, 320.
 Ginger, 59.
 Gneiss, 94.
 Goat Antelope, 73.
 Gold, 95.
 Gold-Standard Law, 347.
 Gongs, 176, 369.
 Gourds, 47.
 Government Officials, Siamese, 305, etc.
 Governor, 321, 323, 336.
 Grammar, Siamese, 269, *et seq.*; 300-2.
 Grand Palace, 24.
 Granite, 92-94.
 Grierson, Sir G., 104.
 Groups, Racial, 112.
 Guava, 45.
 Gulf of Siam, 2.
 Gutta Percha, 50.

H.

Ha Wat, Khun Luang, 280.
 Hair, Methods of wearing the, 145, 153, 154, 159, 173, 175.

Hansa (Sacred Goose), 278-9.
 Harbour Department, 336, 335-6, 376.
 Harbour Regulations, 336, 376.
 Haribunjaya (Lampun Chai, Labong or Lampun), 183.
 Health Department, 329, 332-3.
 High Commissioners, 322-4.
 Highways, Department of, 378-82.
 Historical Works, 289 *et seq.*
 History, 178-288.
 Holy Order, The Buddhist, 159-60.
 Honourable East India Co., 211, 215.
 Hongkong and Shanghai Banking Corporation, 341, 349.
 Horoscopes, 279.
 Hospitals, 334-5.
 Hours of the Day, 368.
 House of Chakkri, Order of the, 248.
 Houses, *see under* Siamese.
 Hunters, 117.

I.

India, 203, 345, 363 (see also 'English Officials.')

Indian Rupee, 341, 343.
 Infantry, The, 317.
 Inland Sea or Telé Sap, The, 10.
 Interior, Ministry of, 321-30, 336.
 Interior Reforms, 323-36.
 International Courts, 373.
 International Postal Convention of A.D. 1920, 379.
 Ipoh, or Upas, poison, 117.
 Iron-working, 99, 133, 177.
 Irrawaddy river, 108.
 Irrigation Department, 356-8.
 Irrigation projects, 357-8.
 Islands, 5.

J.

Jails Department, 329.
 Jakun, 119.
 Japan, 201, 203, 310.
 Japanese, 310; Sericultural experts 354.

Jasmine (*Mali*), 50.
 Johnson, Hendrick, 201.
 Jourdain, John, 201.
 Justice, Ministry of, 369-378.
 Justice, Reform of, 369, 372.

K.

Ka, 116, 133.
 Kaché, 108, 133-7.
 Kaempfer, Dr. E., 293.
 Kalahom, 234.
 Kambodia, 137, 179, 181, 182, 184, 186, 187, 188, 191, 193, 194, 197.
 Kambodian, 1, 126-7, 185, 312, 321, 324.
 Kambodian politics, 216.
 Kambodian provinces, 319, 321, 323.
 Kamnan, 308.
 Kampengpet, 32.
 Kap metre—see Poetry, 282-3.
 Kapi, 156.
 Karien, 163, 174-7.
 Kaw, 143-4.
 Kedah, 11.
 Ken, The, 142, 171.
 Keng Tung, 2, 313.
 Khlong metre (see Poetry), 282, 284.
 Khun, 308.
 Khmer, 107, 109, 126-8.
 Khmer ruins, 128.
 Khmer, Origin of the, 128.
 Kitiyakorn of Chantaburi (Prince), 352.
 Klon (or Khlong) Metre (see Poetry) 282, 284.
 Koh Pangan, 5.
 Koh Samui, 5.
 Koh Si Chang, 5.
 Kolarian races, 105.
 Korat, 9, 13, 30, 208.
 Kra, Isthmus of, 9.
 Krabin hills, 13.
 Krat, 3, 4, 6.
 Kromakan, 323.
 Krung Kao (see Ayuthia), 28.
 Krung Tépe (see Bangkok), 21.
 Kublai Khan, 170, 192.
 Kuwi, 6.

L

Laboratory, Government, 363.
 Laha, or Palm-leaf writing material, 279.
 Lakes, 20.
 Lake Sui, 235-7.
 La'lon city, 195, 201.
 Lamet clan, 133.
 Land frontiers, 2.
 Land Laws, 354.
 Land Measurement, 355-6.
 Land Registration, 354.
 Land Revenue, 353-360.
 Lands and Agriculture, Ministry of, 353-60.
 Langsat, 41.
 Language, Chao Nam, 121.
 „ Kaché, 135.
 „ Khmer, 127.
 „ Lao, 170, 323.
 „ Malay, 124.
 „ Meao, 137.
 „ Môn, 129-30.
 „ Semang, 118.
 „ Siamese, 260-88.
 Lao, 1, 109, 166-71, 184, 185-92, 261.
 Lao Bông Dam, 169.
 Lao Pung Dam, 167, 168.
 Lao Chiefs, 236.
 Lao Pung Khao, 167, 169.
 Lao States, 208, 323.
 Lao-Tai Family, 109, 110, 168, 236.
 Law Courts, 376.
 Law of Conscription, 315.
 Law of Contracts, 361.
 Law School, 372.
 Lawa, 107, 131-2.
 Laws, 193, 310, 369-77.
 Laws of Manu, 375.
 Lead, 97-8.
 Legal Advisers, 373.
 Legal Works, 281.
 Legations, Siamese, in America, Europe and Japan, 310.
 Legislative Council, 306.
 Leonowens, Mrs., 295.
 Lettres Édiñantes et Curieuses, 292.
 Library, The National, 286, *et seq.*
 Lignite, 100.
 Limestone formations, 92-6.

Linear Measure, 364.
Liquor consumption, 340.
Liquor revenues, 339-41.
Lishaw tribe, 144.
Literature, 260-88.
Loan, Malay States to Siam, 224, 351-2.
Loans, Public Foreign, 341, 350-8.
Local Government, Ministry of, 329.
Lopburi, Lawapuri or Lavo, 16, 182, 188, *et seq.*
Lord Cromer, 351.
Lords Lieutenant, 329.
Luang, a title, 307.
Luang Prabang, 2, 134, 168, 208.
Lusiad of Camoens, 290.
Lû tribes, 111, 172-4.

M.

Magadha, 261.
Magic, 279.
Maha Indradiracha (King), 196-7.
Maharat Circle, 7.
Mahatlek (Royal Pages), 234, 307.
Mahomedanism, 223.
Main Divisions of Siam, 5.
Maize, 64.
Malacca, 182, 200, 201, 204, 223.
Malay Annals, 28.
Malay Language, 260.
Malay Peninsula, 2, 3, 9, 119, 215, 223.
Malay Provinces of Siam, 321.
Man, 102.
Mango, 42.
Mangosteen, 40.
Mangrove, 16, 46.
Manu, Laws of, 375.
Maprang, 42.
Marble, 92.
Marine Deposits, 95.
Marriage, 118, 121, 133, 136, 139, 144, 146, 160-3, 176.
Martaban, 205, 208, 210, 211.
Massie, Dr., 95.
Ma Tuan Lin, 289.

McCarthy, Jas., 298.
Mcao tribe, 137, 139.
Medicine, 279.
Medical schools, 254.
Meklong river, 6, 7, 12, 19, 20, 92, 95, 105, 108, 109, 110, 167, 220, 221.
Meklong river, 3, 6, 18, 205.
Menam Chao Phaya, 6, 7, 14-17, 21, 26, 128, 202, 206, 333.
Menam Kông Ka river, 19.
Menam Kwa Noi river, 18.
Menam Kwa Yai river, 18.
Menam river, 15.
Meping river, 14, 15.
Merchant, The King as, 235.
Meres (lakes), 20.
Mergui, 204, 205, 208, 211.
Mergui Archipelago, 119.
Mewang river, 15.
Mexican dollars, 341.
Meyom river, 15.
Mica, 94.
Military School, 253, 254, 258, 332.
Millet, 64.
Mines, Department of, 328, 359-60.
Mining Act, 360.
Ministerial Cabinet, 306.
Mint, The Royal, 347, 346, 363.
Modern Laws, 375-7.
Molybdenum, 99.
Môn, 1, 104, 106, 128-30, 312.
Môn-Annam, 119-20, 123, 131, 139, 223.
Monastery Schools, 253.
Money lenders, 363.
Mon-Khmer, 179-83.
Mongkut (King Rama IV.), 214, 216.
Mongolian, 1.
Monkeys, 67, 68.
Monopolies, 337, 339-40.
Monton, Admin. Circle, 322, 371-2.
Moraft, Sir R., 251.
Moths, 88.
Mouhot, Henri, 66, 295.
Mountains, 13, 14, 91.
Muang, a province, 321-3.
Muang Fang, 100, 140, 143.
Muang Sing, 2.
Muhsô, 108, 140-2.

Mün, a title, 307.
Music, 118, 122, 142, 171.

N.

Nai Ampō; an official title, 322.
Nakon Chai Si, or N. Pathom, 8, 181.
Nakon Nayok hills, 13.
Nakon Nayok river, 17.
Nakon Sawan, 7, 8, 32.
Nakon Sri Tammarat, Lakon or Ligor, 940, 31, 181, 210, 223.
Nam Ing river, 20.
Nam Mun river, 19, 20, 93.
Nangseu Dam (book), 285.
National Debt, 351.
National Expenditure, 338-9.
Natural History Society, 66, 67, 302.
Naval Reorganization, 320.
Naval School, 254.
Navy, The Royal, 319-21, 332, 336.
Neale's narrative, 294.
Negrito, 12, 103, 104, 116, 223.
Neolithic Period, 103.
Newspapers, 302-4.
Nickel coin, 346.
Nine Gems, Order of the, 247.
Nipa, 16, 62.
Nirat poetry, 283.
Niti (see Literature).
Nong Sano, 191 *et seq.*
Nopamat, The Lady, 280.
Norodom (King of Kambodia), 216, 218.
Northern Siam, 6-8.

O.

Ocya (obsolete title), 234.
Office of Health, 334.
Official titles, 307 *et seq.*
Oil (Petroleum), 100.
Old Red Sandstone, 94.
Opium consumption, 339-41.
Opium cultivation, 139, 141, 146.
Opium Revenue, 339-41.

Oranges, 41.
Orchids, 59.

P.

Paddy (unhusked rice), 365-6.
Pai, a Kaché clan, 133.
Paknampoh, 15, 17, 31.
Palace Language, 276-7.
Pallegoix, Bishop, 113, 295.
Pali, 261-2, 264, 279, 307, etc.
Palms, 61.
Pangolin, 72.
Pantani (obsolete title), 308.
Panung, 246.
Papaya, 48.
Paper Currency, 341, 349-52.
Parrots, 77.
Pasak river, 16.
Passion flower, 47.
Pasteur Institute, 334.
Patalung, 10.
Patat range, 13.
Patronage, 324, 383.
Pattani (*Malay*, Patani), 3, 4, 10, 32, 201.
Pattani Circle, 10, 20.
Pattani river, 20.
Pavie, M., 298, 380.
Payap Circle, 7.
Pegu, Wars with, 191, 195-7, 205.
Pelican, 20, 78.
Penal Code, 282.
Pencil, (*toa rong*), 285.
Pepper, 12, 29, 55.
Periodicals, 302.
Petchabun, 7.
Phaya, a title, 307.
Phaya Tak (King), 207-9.
Philippine Islands, 103.
Phra, a title, 307.
Phra Klang, 337.
Phra Narai I (King), 191, 192.
Phra Narai II (King), 200-204.
Phra Naret (King), 197-200.
Phra Pathom (see Nakon Chai Si).
Phra Petracha (King), 204.
Phra Ruang (King Arunawatti Ruang), 185-8.
Phra Sucharat (King), 188.

Phratabong (Battambang), 214.
 Physical features, 12.
 Piastré of French Indo-China, 343.
 Picul, or Hap, a weight, 364.
 Pig, 73.
 Pigeons, 77.
 Pirates, 31.
 Pitsanulok, 7, 31, 92.
 Pitti Sibsong Duen (*see* Literature).
 Plains, 7, 91.
 Pnom Deng Rek, 3, 13, 17.
 Poetry, 282-5.
 Police, 329, 330.
 Police Hospitals, 334.
 Polygamy, 163, 245.
 Pomegranate, 45.
 Population, 9, 12, 113-28, 119,
 123, 127, 130, 143.
 Portugal, 200.
 Portuguese, 1, 201, 202.
 Posts and Telegraphs, 378-81.
 Prai (Lake), 235-8.
 Primary Schools, 252 *et seq.*
 Printing, 219, 287.
 Prisons, 371.
 Pronouns (*see* Grammar).
 Public Service, The, 233-8.
 Puket Circle, 4, 12.
 Puket Island, Ujong Salang, Junk
 Ceylon or Thalang, 5, 12, 119,
 124, 210, 211.
 Puket Town (Tongka or Tungka),
 27.

Q.

Quarantine, 332-3.
 Quartz, 93.
 Queens, 234.

R.

Rabi of Ratburi (Prince), 288,
 373, 376.
 Racial Groups, 112.
 Raheng, 15, 18.
 Raids, Burma frontier, 219.

Railway construction from Revenue
 350-2, 378.
 Railways, State, 350-2, 378.
 Rainfall, 34-36.
 Rama I, 22, 210-12, 367.
 Rama II, 212, 213-14.
 Rama III, 215, 216.
 Rama IV, 216-19, 229, 238, 246,
 247, 248, 265.
 Rama V, 219-22, 225, 229, 238,
 239, 241, 245, 248, 254, 255,
 280, 285, 367.
 Rama VI, 225-27, 230, 231, 238,
 239, 240-6, 247, 248-9, 254-5,
 280, 367, etc.
 Rama (Order of), 248.
 Rambutan, Ngok, 41.
 Rank, Official, 232, 233-4.
 Rank, Princely, 232-3.
 Rathburi, Rajaburi or Rajburi, 8,
 31, 181.
 Ratna Varaborn (Order of), 248.
 Rats, 71.
 Raynal, Abbé, 293.
 Rays and Sharks, 82.
 Red Sandstone, 92.
 Reform of Public Services, 308.
 Reforms of Rama IV, 217.
 Religion, 117, 121, 224, 127, 130,
 131, 136, 139, 141, 144, 146,
 159, 160.
 Reserves, Army, 317.
 Revenue, 322, 325, 327, 335.
 Revenue Department, 322, 335.
 Revolution, 204, 292.
 Rhinoceros, 72.
 Rice, 116, 122, 125, 133, 137, 139,
 141, 145, 156, 307, 365-6.
 Rice-trade, 365.
 Riverine forts, 320.
 Rivers, 14-20.
 Roads, 23, 381.
 Roi Et Circle, 9.
 Roman Catholic Missionaries, 130,
 201, 203.
 Royal Commission on National
 Resources, 357.
 Royal Commission on Prisons, 371.
 Royal Commission on Weights and
 Measures, 366.
 Royal Navy, 319-20.

Royal Page Colleges, 253, 258.
 Royal Pages (see Mahatlek).
 Rubies, 99.

S.

Sacred Lotus, 39.
 Saigon, 222.
 Saigon, Political Mission to, 222.
 Sakai, 111, 112, 116.
 Sakdi, 307.
 Salt, 100.
 Saltpetre, 101.
 Salwin, 3, 6, 12, 15, 110.
 Sampeng, 25.
 Sam-Roi-Yot, 219.
 Sam-Sams, 12, 110, 174.
 Sanitary Department, 332-5.
 Sanskrit, 261, 264, etc.
 Sapphires, 99.
 Saraburi, 31.
 Satang (copper coin), 346.
 Satow, Sir E., 296.
 Sawankalok, 32.
 Scheelite, 98.
 Schists, 94, 96.
 Schmidt, Rev. Father, 178.
 Scholarships, 255.
 Schoolboys, 257.
 Schools, 252-9.
 Seasons, 34, 35.
 Secondary Schools, 253.
 Semang, 104, 116-19.
 Semang Music, 118.
 Sericulture, 354.
 Setul, 124.
 Shan, 1, 168, 170-3.
 Shan States, The, 109.
 Shan troubles, 326.
 Sharks, 82.
 Shipping, 336.
 Siam an Agricultural Country, 259.
 Siam Commercial Bank, 342-3.
 Siam Expeditionary Force (1918),
 227-8, 317-18.
 Siam Society, The, 302.
 Siamese, The, 147-60.
 Siamese Character, 147-8.
 Siamese house, 155-6.

Siamese Language, 260-88.
 Siamese Language, Works in the,
 300-2.
 Siamese Law Courts, 369-75.
 Sibsong Chutai, 109.
 Sibsong Panna, 109.
 Silver, 96, 343-7.
 Sir. (petticoat), 246.
 Sin Byu Shin (King of Burma),
 205, 207, 208, 209.
 Skeat and Blagden, 116, 177.
 Slates, 92, 94.
 Slaves, 237, 330-1.
 Slavery, 237-9, 330-1.
 Smyth, H. W., 297.
 Snakes, 81, 82.
 Snipe, 78.
 Social Intercourse, 233, 234, 240-1.
 Social Organization, 232, 244, 245-7.
 Social Reform and Development,
 240, 242-5, 246-7.
 Somdet Chao Phaya (a title), 307.
 Somdet Chao Phaya Maha Krasart
 Seuk, Phaya Chakkri later King
 Rama I, 209, 210.
 Somdet Phra Chao Prasart Tong,
 Phra Nang Klao, King Rama III.,
 214.
 Somdet Phra Paramindr Maha
 Mongkut, Chao Fa Mongkut,
 King Rama IV, 216.
 Somdet Phra Paramindr Maha
 Chulalongkorn, King Rama V.,
 219-25.
 Somdet Phra Paramindr Maha
 Vajiruwudth, Phra Mongkut
 Klao, Rama VI, 225.
 Sóngkla or Singora, 4, 31.
 Sornao (=Siam), 291.
 Southern Shan States, 2.
 Southern Siam, 9-13, 34, 41, 95.
 Spanish Dollars, 341.
 Sparrow, 75.
 Spirit Worship, 124, 131, 136, 139,
 144, 173, 176.
 Square measure, 365.
 Squirrels, 71.
 Squirrels, Flying, 71.
 Sri Wijaya or Samoratha, 181.
 State Railways, 378, 382 (see also
 under 'Transport').

Statistics, Dept. of, 362.
 Streets, 23, 25, 32.
 Students abroad, 251, 255.
 Sudhamma Raja, 189.
Sui (lake), 236-8.
 Sukhothai, 32, 180-90.
 Sumatra, 203.
 Sun Yat Sen, Dr., 343.
 Supan, Supanburi or Suvarna-
 bhumi, 32, 181, 192 *et seq.*
 Surat, or Surashtra Dani, Circle, 10.
 Surnames, 244.
 Survey Dept., 355, 365.
 Survey School, 253, 356.
 Sweet Potato, 52.
 Syme's *Mission to Ava*, 363.

T.

Tachard, Père, 292.
 Tak or Taksila, 182.
 Talé Sap or Chalé Sap; Inland Sea
 of Sóngkla, 10, 11.
 Talé Sap or Chalé Sap; Great Lake
 of Kambodia, 12, 93.
 Tamarind, 43.
 Tana or Ton-Buri, 208.
 Tapir, 72.
 Tattooing, 117, 151, 167, 173, 237.
 Tavoy, 205, 208, 210, 211.
 Teak, 54, 156, 366.
 Telegraphs, 380-2.
 Temperature, 32.
 Thabin Shwé Hti (Burmese King
 of Pegu), 195.
 Thai or Siamese, 147, 180.
 Thalang or Chalang (Ujong Salang
 or Junk Ceylon or Puket Island),
 5, 27.
 Theft, 148.
 Thompson, P. A., 299.
 Tibeto-Burman racial family, 108,
 109, 145.
 Tical or Baht, 344, 363.
 'Tigers Whelp'—see Boy Scouts.
 Tin, 27, 96-7.
 Titles, Official, 307.
 Toa Rong Pencil, 285.

Tobacco, 52, 118, 122, 137, 139,
 141, 146.
 Towns, 21-32.
 Trachang or Daching, a weighing
 apparatus, 364.
 Trade development, 321, 341-3.
 Trade, Foreign, 202, 204, 215.
 Trade Laws, 361.
 Trade Monopoly, 235.
 Trademarks Law, 361.
 Treaties, American, 215, 217, 218,
 228, 311, 375.
 Treaties, Belgian, 218.
 Treaties, British, 3, 215, 217, 218,
 223-5, 311.
 Treaties, Danish, 218, 311.
 Treaties, Dutch, 202.
 Treaties, French, 218, 222, 311, 374.
 Treaties, Hanseatic Towns
 (Germany), 218.
 Treaties, Italian, 218.
 Treaties, Norwegian and Swedish,
 218.
 Treaties, Portuguese, 218.
 Treaties, Prussian (Germany), 218.
 Tribute, Chinese, 212-14.
 Tribute, Kambodian, 214, 216.
 Tungka, Tongka or Puket Town, 27.
 Tungsten, 98.
 Turpin (*Histoire de Siam*), 293.

U.

U Thong, Phra Chao (or King
 Ramatibodi), 193, *et seq.*
 Ubon Circle, 9, 30.
 Udorn Circle, 9.
 *Uparach (Uparat) or Wang Na or
 'Second King', 216, 234.

V.

Vajira Mala Order, 248.
 Vallababorn Order, 249.
 Van Vliet, J., 291.
 Verbs (see Grammar).

Vichitrakarnana, Prince (The late Patriarch), 280.
 Victoria Point, 2, 10.
 Volcano, 94.
 Vultures, 77.

W.

Wa (Wah), unit of length, 365.
 Wallace, A. R., 107.
 Wane or Wén, 236.
 War, Anglo-Dutch, 293.
 War Captives, Disposal of, 236, 314.
 War, Ministry of, 311-19.
 War with Annam, 130.
 War with Germany, 227-8.
 War with Kedah, 319.
 War with Kambodia, 190, 194, 198, 207, 214.
 Wars, Ancient, 1, 179, 181, 183, 184, 188.
 Wars with Pegu—Burma, 191, 195-9, 205-11.
 Wat, 265, 286.
 Water Hyacinth, 63.
 Waterworks, 25, 333-4.
 Wattana Witaya School, 256.
 Waves of Humanity, 104, 108.

Ways and Communications
 (Ministry of), 378-81.

Weapons, 117, 127, 173.
 Weights and Measures, 363-7.
 'Wheel of the Law,' 216.
 White Elephant, Order of the, 249.
 Wieng Chan, 106, 109, 168, 205, 208, 215, 221.
 'Wild Tigers' Scout Corps, 242-3.
 Wolfram, 98.
 Writing, Siamese, 262-4.

Y.

Yao Tribes, 108, 145-7.
 Yang Tse Valley, 109.
 Year Book, The Siam, 362.
 Yok—a measure, 366.
 Yomarach (Yomarat), 234.
 Young, E., 297.
 Yuan (see Annamese).

Z.

Zinc, 98.

END OF VOL. I.



